The Art of SIMPLING.

AN INTRODUCTION TO THE KNOVVLEDGE AND *Gathering of Plants.*

VVherein the Definitions, Diviſions, Places, Deſcriptions, Differences, Names, Vertues, Times of flouriſhing and gathering, Uſes, Temperatures, Signatures and Appropriations of Plants, are methodically laid down.

Whereunto is added,
A Diſcovery of the Leſſer World.

By W. COLES.

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To the most Exquisite Lover of Plants, ELIAS ASHMOLE *Esq.*

Honoured Sir,

THough I am a stranger to your Person, yet should I be so to your vertues, I might very well seeme to be an Inhabitant of another Country, and not of this, wherein your Fame is so eminent for countenancing all those that bend their endeavours to advance any kinde of learning. And though I have expressed in

the Epiſtle to the Reader, that I did deſpaire of the patronage of any worthy perſon to my well-meaning endeavours, yet ſince being animated by the generall repute of your excellency in this kinde, and the height of perfe-ction which you have attained in this pleaſant Study, I here preſent you with the Reſult of many yeares experience, which I have imployed for the benefit of my Countrymen, whoſe ignorance in the forms of ſimples is very much to be pitied. In commiſeration whereof, I have made it my care to muſter up a number of ſuch Obſervations, as may tend much to their benefit, if ſo be they can lay aſide their ſelf-conceitedneſs, and diligently follow what is here preſcribed. I goe not about to deceive them with a few empty

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Notions, as Mr. *Culpeper* hath lately done, telling them many Nonſenſicall ſtories of I know not what; when as it is evident to thoſe that knew him, or are able to judge of his Writings, that he underſtood not thoſe Plants he trod upon. And that which addes to his fallacious aſſertions, is, that he hath obtruded theſe things upon the Country people, perſwading them that they would be much for their befit; who being taken with any novelty, ſwallowed his bait, hoping that there might be ſomewhat of value in them, but were too too much deceived, as experience may plainly ſhew. All the Rocks at which he willingly ſtumbled, I ſhall carefully avoid, and plainly demonſtrate to their ſenſes the reaſonableneſſe, plea-

ſure and profit of what I propoſe. The way to make men skiltull in any Art is to acquaint them throughly with the ſubject matter thereof, as alſo with the principles belonging thereunto, without which nothing but confuſion can be expected. I have therefore contrived a ſhort Method which will accompany them in all places, and like a Mercuriall *Statue* diſcover unto them the differences of Plants, by the Obſervation of which they may make a ſpeedy progreſſe in the knowledge of them to their great advantage and ſatisfaction.

And being aſſured how much you are particularly addicted to the admiration of thoſe exquiſite formes, and wonderfull varieties of thoſe vegetable Creatures, and

of

of your ability to judge betwixt the fawning language of a ſmooth-tongu'd flatterer, and the faithfull dealing of a good Common-wealths-man, I crave leave to commit it to your protection, which if you ſhall vouchſafe unto it, I ſhall not value the ſnarles of any ſelf-intereſſed perſons. And thus I humbly kiſſe your hands and ſubſcribe my ſelfe

Your very humble
Servant

Putney Feb. 22. 1655.

Will. Coles.

ERRATA.

PAg. 12. l. 18. for Mr. *Robert Gardiner*, r. Mr. *Bobart Gardiner*, for *Paysick*, r. *Physick*. p. 16. l. 6. for *Agrimonies*, r. *Anemones*. p. 24. l. 4. for *ended*, r. *endued*. p. 39. l. 6. for *Robert*, r. *Bobart*. p. 48. l. 4. for *arc*, r. *if*. p. 139. l. ult. for *politique*, r. *prolifique*. p. 141. for *Anomaticall*, r. *Anatomicall*. p. 156. l. 23. for ἐστι r. ὦ. p. 166. l. 14. for *vanity*, r. *vacuity*. Other literall faults the Reader is desired to mend with his pen.

THE PREFACE.

Gentle Reader,

WHat a rare happineſs was it for *Matthiolus* that famous Simpler, to live in thoſe dayes wherein (as he himſelfe reports) ſo many Emperours, Kings, Arch-Dukes, Cardinalls and Biſhops, did favour his Endeavours, and plentifully reward him? whereas in our times, the Art of Simpling is ſo

farre from being rewarded, that it is grown contemptible, and he is accounted a ſimple fellow, that pretends to have any skill therein. Truly it is to be lamented, that the men of theſe times, which pretend to ſo much Light, ſhould goe the way to put out their owne Eyes, by trampling upon that which ſhould preſerve them, to the great diſcouragement of thoſe that have any minde to bend their Studies this way. Notwithſtanding, for the good of my Native Countrey, which every one is obliged to ſerve upon all occaſions of advantage, and in pitty to ſuch Miſtakers, I have painfully endeavoured plainly to demonſtrate the way of attaining this neceſſary Art, and the uſefulneſſe of it, in hopes that this Embryo, thrown

thus

thus into the wide world, will fall into the Lap of ſome worthy perſons that will cheriſh it, though I knew not any to whoſe protection I might commend it. However I have adventured it abroad, and to expreſſe my reall affection to the publick good, have in it communicated ſuch Notions, as I have gathered, either from the reading of ſeverall Authors, or by conferring ſometimes with Scholars, and ſometimes with Countrey people; To which I have added ſome Obſervations of mine owne, never before publiſhed: Moſt of which I am confident are true, and if there be any that are not ſo, yet they are pleaſant. The reſult whereof will appeare to the underſtanding Reader to be this, That to be

well verſed in the formes and vertues of Plants, is no ſuch contemptible matter, as ſome ſuppoſe, but that God may be glorified, and the Common-wealth profited, as much, if not more, by this Study then any whatſoever. For if every Herbe ſhew that there is a God, as verily it doth, the very beauty of Plants being an Argument that they are from an Intellectuall principle; what Lectures of Divinity might we receive from them, if we would but attend diligently to the inward underſtanding of them? And *Botany* being one of the Handmaids to Phyſick, and every Plant being uſefull for ſomewhat or other, why ſhould they be leſs reſpected then others? eſpecially ſeeing they tend to the preſervation and recovery of Health,

Health, which every one is by Nature engaged to preferre before any other earthly bleſſing, and therefore ought principally to be reſpected. But Phyſitians, & others who ought to be skilled therein, doe for the moſt part ſo much affect Ignorance, that they care not for having the Scales thereof removed from their Eyes, if they did, they would no longer continue Idle, but would immediately ſet about this Ingenious exerciſe. Perhaps the difficulty of attaining to ſo intricate a knowledge, might formerly be pleaded; but now that Obſtacle being removed out of the way, there is no excuſe that I know remaining. If therefore any one will be perſwaded to entertaine good thoughts of this Art, he ſhall have here ſuch

Rules as will be very helpfull to him in the diſcovery of Simples, from which he ſhall receive abundance of content and ſatisfaction. Let him make uſe of them, and according as he findeth, judge. If any profit redound unto him thereby, as I doubt not but there will, I ſhall have my deſire; which is, that all ſorts of Learning may be promoted, but eſpecially this deſpiſed, though advantagious Art of Simpling. I know that Pieces of never ſo exact and curious frame, compoſed by the moſt excellent and eveneſt hand, cannot paſſe through the criticall and cenſorious multitude, without receiving the aduſt effects of their malignant humours: ſo that I may not expect to eſcape ſcotfree, but if there be any one that ſhall carp

too much at these my endeavours, I shall desire him to better them, if he can. Yet in hope of a Candid reception, I have hereunto annexed a small Treatise of Anatomy of the parts of the body of Man, very usefull for young Practitioners; and as I shall finde these my first endeavours approved of by the ingenious, I shall accordingly be encouraged to publish the Anatomy of Plants, being a Treatise of the most known Simples growing in *England*, & the dominions thereof, Physically applyed to each particular disease, incident to each part of the body, either of Man or Woman; with the easie way of Cures of the most malignant Diseases, which may be performed with a small cost, wherein every person may

be

be his own Phyſition: contrived in a new and exact Method, and enriched with many Obſervations, not taken notice of by any other Authors. The Book is well nigh finiſhed, and I hope will be ſhortly ready for the Preſſe.

Farewell.

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An

AN INTRODUCTION TO THE *KNOWLEDGE OF PLANTS.*

CHAP. I.

Of Simpling, its Antiquity, Dignity, Pleasure, and Usefulness in Physick, &c.

SImpling is an Art which teacheth the knowledge of all Druggs and Physicall Ingredients, but especially of Plants, their Divisions, Definitions, Differences, Descriptions, Places, Names, Times, Vertues, Uses, Temperatures, & Signatures. An Art sufficiently derided by the Ignorant & self-conceited, but had in admiration of all those who have received any glympse of the beauty of it. It is a Subject as ancient as the Creation, Plants being a production of the third day: Notwithstanding which, I cannot readily close with their opinion, who over-confidently deny the Sun, Moon, & Stars, to have any influential power upon Vegitables, &c. by apprehending that Plants had the pre-

cedence of Creation; becauſe (upon a ſuperficial view of the Text) the Sun ſeems not to have been made until the 4th. day: For though that Light which we now behold contracted in the Sun, was not drawn together into that Body untill the 4th day, yet was the ſame created before, and ſuch its collection made up from the ſcattered parts of that Primitive & Æthereal Light, which received creation upon the firſt day; & which untill the 4th continued diſperſt, darting & rowling, through the higheſt part of the Creation: Beſtowing ſome proportion both of heat and influence upon thoſe new created Vegetables, though not ſo vigorouſly powerful and certain, as when it was afterwards ſhut up within the narrower compaſs of that illuſtrious Globe. It proſtitutes not it ſelf to vulgar perſons, or capacities, as Mechanick Arts doe, but is courted by Emperours, Kings, Queens, Lords, Ladies, and other Perſonages of great qualities and parts. Though many Phyſitians are ſo lazie now as to ſlight it, yet heretofore not onely they, but many noble Men and Women did

ſtudy

ſtudy this part of Phyſick, then which they deſired nothing more. Nothing ſeemed to them more magnificent, or princely, then *Scire poteſtates herbarum, uſumque medendi.* How renowned is the fame of *Mithridates* King of *Pontus* unto this day? who indeed deſerved to be remembred for his skill in 22 ſeverall Languages, yet he had not been ſo often called to minde, had he not invented that famous Electuary called Mithridate, which he could never have done, if he had not had skill in this very Art. *Medea* was a Kings Daughter, and yet how excellently was ſhe verſed herein? The pleaſure that is received from it, no man knowes but he that is acquainted with it. What a pleaſant thing it is for a Man (whom the Ignorant thinke to be alone) to have Plants ſpeaking Greek and Latine to him, and putting him in minde of Stories, which otherwiſe he would never thinke of? It will yeild a man diſcourſe whither ſoever he goes, (travaile he by Sea or by Land) that will render him *Facundus*

cundus Comes, and such an one, *in via pro vehiculo est*. With what rare Colours, and sweet Odours doe the flourishing Fields and Gardens entertaine the Senses? The usefulnesse of it no judicious man can deny, unlesse he would also deny the vertues of Herbes, which experience it selfe doth daily approve. For how often doe we see, not onely mens Bodies, but even the Mindes of those that are even distracted, to be cured by them? I know there be many Physitians who hold it a disparagement to thinke of such small matters, and therefore they leave this office to the Apothecaryes, who for the most part are as ignorant as themselves, and rely commonly upon the words of the silly Hearbwomen, who many times bring them *Quid* for *Quo*, then which nothing can be more sad. So that by reason of this their ignorance in Simples, their Medicines oft-times sort not their wished, but sometimes contrary effects, to the great prejudice of their Patients. Therefore I holde it more then con-

convenient, that all thoſe that deale in Phyſick or Surgery, ſhould be skilled, not onely in the qualities, but the formes of Simples. For though a man know the qualities never ſo well, and know not the Forme, he will be at a notorious loſſe; but when both are rightly known and applyed, they cure Diſeaſes, reſiſt Poyſons, heale Soars, yeeld Food, make Sawces, and what not, even at little or no charges.

CHAP. II.

That this Art is alſo neceſſary for thoſe that intend to be Divines.

IT is conceived under favour, that though this Knowledge is eſpecially neceſſary for Phyſitians, Apothecaries, Chirurgions, and ſuch as deal in Medicines; yet it would be uſefull to many other Profeſſions: but becauſe Divinity is the nobleſt of them, I will ſpeak onely to that at preſent. There

are in Scripture severall Expressions and Similitudes, either concerning Plants, or derived from them, which cannot throughly be understood without this Art. There is mention, not onely of *Grasse*, *Herbes*, and *Trees* in generall, but of the tree of knowledge of Good and Evill, and the tree of Life, either of which would admit of a particular discourse; of the *Figtree*, whose leaves our first Parents sowed together to make them Aprons, and of *Gopher* wood. There is mention also of *Lentills*, wherewith *Jacob* made Pottage, and sold them for *Esau*'s Birth-right, of *Balme*, *Mirrh*, *Aloes*, *Cassia*, *Frankincense*, the *Citrine* tree, the *Palme*, the *Mirtle*, the *Willow*, the *Vine*, the *Cedar*, the *Bramble*, and of other trees; of *Gourds*, *Hemlock*, *Wormwood*, *Annise*, *Cummin*, &c. Here we may note that *Aloes* and *Lign-Aloes*, though in Scripture they be used for one and the same thing, yet they are not so, the one being the Juice of a *Sea-plant*, the other the wood of a very beau-

beautifull Tree. It would be tedious to reckon up the Materialls of the Arke, and of *Solomons* Temple, and to give the reason why such Wood, and such Stones, and such Metalls were used. That the *Lillies* amongst the *Thornes* were *Woodbines*, is not known to every one, or that the Husks which the Prodigall Sonne did eate, were the fruit of a tree, or that Ἀμάραντος which Saint *Peter* puts for a thing that fadeth not away, is a flower which will endure for a very long while. I could have reckoned up many more, which for brevity sake I omitted, for understanding of the inward meaning whereof, no small skill is required. Give me leave to give you an instance in the words of *Hosea*, cap. 10. 4. *They have spoken words falsely, in making a Covenant; thus Judgement springeth up like Hemlock in the furrowes of the field.* For illustration of which place, the very evill, dangerous, and poysonous qualities of that pernicious weed, would be considered, which sometimes springeth up in such

places, where better grain is expected, that so it may more plainly appeare, that the judgement of those Magistrates the Prophet speaks of was not just, but stunk like *Hemlock* in the Nostrills of the Almighty, and was as dangerous to the politick welfare of the people, as *Hemlock* was to the Health of their Bodies. This is mine owne glosse, how consonant to the Text, or what Commentators writs thereon, I leave to the judgement, or at least the search of the learned Divines; but for some that professe themselves to be so, I doubt whether they know what *Hemlock* is. If I should aske one of our Upstarts what those things were which *Reuben* bringing home, his Mother *Leah* and *Rachel* kept such a clutter about, I wonder what answer he would make? I believe he would say they were *Mandrakes*, and if I should demand againe what *Mandrakes* were, I suppose he would say he could not tell, (an answer unbeseeming his profession) or which is worse, that they were

roots

roots growing in proportion like a Mans body, which make a wonderfull skreeking at their pulling up, and perhaps that they cauſe fruitfulneſſe in women, if they carry the ſame near their bodies: whereas in *Mandrakes* there is no ſuch proportion, skreeking, or vertu, as every one that knows them can tel. I know not how the Tranſlators of the Bible came to miſtake, but the word in the Originall is a common word, ſignifying amiable & ſweet ſmelling flowers, (and is uſed, *Cant.* 7. 13. in the ſame ſenſe) which *Reuben* brought home for their beauty and ſmell, rather than their vertu, whereas in the flowers of *Mandrake* there is no ſuch delectable or amiable ſmell. This is the judgement of Mr. *Gerrard*, whoſe reaſons for the ſame you may ſee, if you conſult his Herball. Thoſe which are skill'd in the originall, would doe well to compare the Mandrake and it together, with the circumſtances, and ſee if it be not ſo. Thus if a Divine were a good Herbariſt, he might be much more accurate

in the interpretation of Scripture, than many in our dayes are.

CHAP. III.

Of the Restorers of this kinde of Philosophy, of some of the chiefe writers thereof, and of some skilfull men now living.

THough we gather from the Scriptures, that there was no Plant whereof *Adam* understood not the name or vertue before his Fall, yet after that, as the world grew elder in time, so grosser in ignorance: this kind of Philosophy was almost, if not altogether, forgotten; insomuch that the Græcians, who are said to be the Inventers of all Arts and Sciences, except the Mathematiques, attribute the invention hereof to *Chiron* the famous Centaure. Doubtlesse *Chiron* was a great restorer of it, whom the Poets feign to be no lesse than the son of *Saturn* and *Phillyra*, from whom

Chi-

Chironium, that is, *Centaury* takes its name. To this renowned Doctor was *Æsculapius* the son of *Apollo*, set to school, who came to that perfection in Physique, that among the Ancients he was reputed the God thereof. He was Schoolemaster also to *Achilles*, that magnanimous *Grecian* Captain, from whence *Achillea*, that is, *Millefoile*, took its name. The Scripture tels us of *Solomon*, that he spake (I conceive he wrote) of Trees from the *Cedar* which is in *Lebanon*, to the *Mosse* that groweth upon the Wall, for so the best Translations have it; but his Books, with the writings of many others are lost. The chiefest and antientest that remaine, are those of *Theophrastus*, *Dioscorides*, *Pliny*, *Galen*, &c. who have done rarely upon this Subject, as also some later *Arabians*, as *Avicenna*, *Serapio*, *Mesue*, *Rhasis*, &c. Neither hath our Nation been without its *Gerrard* and *Parkinson*, who have bestowed much labour and travaile in their voluminous Herballs. Besides these, there have

have been many more which have been excellently well verſed in Simpling, though we finde not that they committed their knowledge to writing. Such as were *Lyſimachus* King of *Thrace*, from whom *Lyſimachia*, that is, *Willoweed* had its name. *Gentius* King of *Illyria*, from whom *Gentian*, *Artemiſia* Queen of *Caria*, from whom *Artemiſia*, that is, *Mugwort*, takes its name; *Evax*, *Cyrus*, *Dioclesian* the Emperour, &c. Thoſe that I have known moſt famous in my time here in *England*, are Doctor *How*, one of the Maſters of the Phyſick Garden at *Weſtminſter*, Mr. *Croſſe*, ſometimes one of the Eſquire Bedles of the Univerſity of *Oxford*. Maſter *Robert Gardiner* of the Phyſick Garden there, and Maſter *Morgan* the Gardiner at *Weſtminſter*, who are moſt expert herein, but eſpecially my much honoured friend, Maſter *William Brown* of *Magdalen* Colledge, to whom I acknowledge my ſelfe beholding, for part of my little skill.

CHAP.

CHAP. IV.

Of the ſubject matter of the enſuing Treatiſe.

SO much for the Porch. VVe come now to the ſtructure, which will not be great. The Materialls that we ſhall uſe in the rearing of it, will be Druggs, but eſpecially Plants. By Druggs I meane thoſe Phyſicall Ingredients which are brought out of forreigne Countreyes, as *Pepper*, *Cloves*, *Cinamon*, *Mirabolanes*, *Agarick*, *Sagapenum*, *Sarcocolla*, &c. *Saſſafras*, *Lignum Aloes*, *Sealed Earth*, *Bolearmeniack*, &c. But of theſe I ſhall ſay little more then onely name, becauſe we ſhall endeavour to keep our ſelves within the bounds of our owne Countrey, whoſe good it is we eſpecially aime at. By Plants I meane whatſoever the Superficies of the Earth doth put forth, if it be endued with a vegetative Soule, and that onely. And of theſe there are five ſeve-

ſeverall ſorts; 1. *Trees*, 2. *Buſhes*, 3. *Shrubs*, 4. *Herbs*, 5. Neuters. Trees are Plants which riſe out of the ground, with one ſubſtantiall ſtemme, which is called the Trunk or Body, and afterwards ſpread themſelves into divers Arms and Branches; as *Oakes*, *Pearetrees*, *Elmes*, *Aſhes*, &c. Buſhes are thoſe that riſe out of the ground with many ſtalkes, which afterwards put forth themſelves into many leſſer boughs; as *Roſes*, *Oſiers*, *Thornes*, *Elder*, &c. Shrubs are of a woody ſubſtance, yet doe not much exceed the bigneſſe of ſome Herbes; as *Butchers Broom*, *Lavender Cotton*, *Groundpine*, *Southernewood*, &c. Herbes are thoſe whoſe footſtalkes cannot be reckoned to be wood, but doe for the moſt part conſiſt of Leaves, as *Fennel*, *Everlaſting*, *Baume*, *Mints*, &c. Neuters are thoſe which have neither Boughs nor Leaves, as *Moſſe*, *Toadſtooles*, *Sponges*, &c. This is the uſuall Diviſion of Plants, which whether it be exact or not, I refer my ſelfe to the judicious Reader. Of *Trees*, *Buſhes*, *Shrubs*,

Shrubs, and *Neuters*, I may treat occaſionally, but I ſhall bend my endeavours to ſpeak, eſpecially of Herbes, to whoſe ſub-diviſion I muſt proceed.

CHAP. V.

Of the ſub diviſion of Herbs.

AS there be ſeveral diviſions of Plants, ſo there be alſo ſub-diviſions, which I ſhall ſumme up in this Heptade, 1. *Potherbs*, 2. *Breadcorne*, 3. *Pulſe*, 4. *Phyſicall Herbes*, 5. *Flowers*, 6. *Graſſe*, and 7. thoſe which we in *England* call weeds. By *Potherbs*, I mean thoſe we boyle, or eat raw, whether roots, fruits, or tender ſtalks, and leaves, as *Turneps*, *Carrets*, *Radiſhes*, *Leeks*, *Onyons*, *Cives*, *Cucumbers*, *Melons*, *Pompions*, *Lettice*, *Parſly*, *Sorrell*, &c. By Breadcorn, all ſorts of *Wheat*, *Rye*, *Barley*, *Oats*, *Rice*, *Pannick*, &c. By *Pulſe*, *Peaſe*, *Beans*, *Vetches*, *Tares*, *Lupines*, &c. By phyſick herbs, I mean them that are ſo called

ſo called, κατ' Ἐξοχὴν, for otherwiſe all are ſo, more or leſſe, and thoſe are found either in gardens, as *Angelica*, *Dragons*, *Maſterwort*, *Solomons ſeal*, *Elecampane*, *Licoriſh*, *Saffron*, &c. or in the fields, *Tormentill*, *Agrimony*, *Fluellin Woodſorrell*, &c. By *Flowers*, *Snapdragons*, *Lillies*, *Iris*, *Narciſſus*, *Larkeſpurs*, *Tulips*, *Agrimonies*, *Hyacinths*, &c. By *Graſſe*, *Satyrions*, *Knapweed*, *Scabious*, *Yarrow*, *Pearl-graſſe*, *Dog-graſſe*, *Trefoile*, *Dayſies*, *Crowfoot*, *Ladies Bedſtraw*, &c. I finde no word for a weed, either in Latin or Greek, yet becauſe it is ſo common a word in *England*, I make that a kinde, and thereof are, *Chickweed*, *Horehound*, *Archangell*, *Cleavers*, *Groundſell*, *Nettles*, *Hemlock*, *Bindweed*, *Poppy*, which ſome call *Redweed*, *Cockle*, *Mayweed*, &c. This is a diviſion (I confeſſe) I never met with in any Author, and ſome faults haply may be found in it; but herein you may perceive that I endeavour (as much as I can) to condeſcend to capacities of the vulgar, whoſe good I heartily wiſh.

CHAP.

CHAP. VI.

Of the proper places where Plants are to be found.

BUt may not ſome ſay, what tell you us of theſe herbs? we know not where they grow; or if you ſhould tell us, we might as ſoon find them as a needle in a bottle of hay; for how ſhould we tell how to know the forms of them, or what they be like? I ſhall therefore firſt lead you to ſome of the places where they grow, for it would be an *Herculean* labour to undertake them all; and then I ſhall endeavour to make them known to you. Every one I ſuppoſe knowes, or may eaſily learn of his neighbours, what plants grow in their gardens, and therefore I will not trouble you with them. Come into the fields then, and as you come along the ſtreets, caſt your eyes upon the weeds, as you call them, that grow by the walls, and under the hedge ſides, and it will be an hundred to one if you doe not find there

Verveine

Verveine, Mugwort, Mercury, Cinkfoyle, Jack by the hedge, wilde Tanſey, Knot graſſe, Wilde Orage, Flixweed, Houndstongue, Sheepherds purſe, &c. As ſoon as you come into the cloſes, there you ſhall have *Yarrow, Knapſweed, Ragwort, Scavious, Dandelyon, Ladies Bedſtraw, Docks, Daiſies, wilde Carrets, Treſoyle, Earthnuts*, &c. When you come amongſt the corn, you ſhall finde, *Blewbottles, Poppies, Reſtharrow, Fumitory, Sheepherds needle, Mayweed, Cockle, Corne Marigold, Pimpernell, Cowparſnep, Bindweed, Sow-Thiſtles*, &c. Thence march to the Woods, and there you ſhall have *Woodſpurge, Tormentill, Agrimony, Ladies mantle, Saint Johns wort, Wood-Betony, Wood-Sorrell, Satyrions. Mounſear, Moon wort, Ciſtus, Milkwort*, &c. And from thence into the Meadowes, and there will be *March marigolds, Moneyworth, Meadſweet, Burnet, Coxcombe, Louſewort, Saxifrage, Meadow Rewbarbe*, &c. Thence to the bogge, and there you will have *Horſemint, Cottongraſſe, Pennygraſſe, Butterwort, Bucksbeanes*,

beanes, *Stinking Horſetaile*, the ſmall *Valerian*, &c. And ſo to the river ſide, and there you ſhall ſee grow upon the banks, the great *Valerian*, *Comfrey*, *ſneesWort*, *Wintercreſſe*, *Clowns Allheale*, the great *Dock*, *Water Hemp*, *Willo-weed*, *Flower de Luce*, *Waterbetony*, &c. Caſt your eyes between the banks, and there in the water you may behold the *Water Lilly*, *Water Milfoile*, *Frogbit*, *Caltrops*, *Burreed*, *Water Plantaine*, *Arrowhead*, *Water Parſley*, all ſorts of *Flags*, *Bulruſhes*, &c. And coming home by the ditches, you ſhall finde *Ducksmeat*, *Brooklime*, *Water Crowfoot*, *Water Creſſes*, *Water Parſnips*, *Water Horehound*, *Water Scorpiongraſſe*, *Herſemint*, &c. And coming into the town againe, lift up your eyes to the walls, and there you may chance to ſee *Maiden haire*, *Wall-Bugloſſe*, *Whitelowgraſſe*, *Pollipode*, *Rocket*, *Wall-flowers*, *Pellitory* &c. Look a little higher toward the houſe tops, and you may at a diſtance view *Seengeeen*, or *Houſeleek*, *Stonecrop*, *Herbe Robert*, &c. Now you cannot but ſay

I have named a great many herbs, but you may, perhaps, ſay, to what purpoſe? Doe but obſerve, that herbs in their proper places have the greateſt vertues, though haply they may be found in other places alſo; and you finde that I have wrote to much purpoſe. And though ſome may grow in divers places, yet others are ſo confined, that they cannot be brought into a garden. Some of thoſe which grow in the water, will not eaſily be perſwaded to grow any where elſe: and ſo it is ikewiſe with thoſe which delight in dry places. You may ſeek ſome plants in ſome places till your eyes drop out, and never finde them; ſo true is that of the Poet, *Non omnis fert omnia tellus.*

CHAP.

CHAP. VII.

Of the parts of Herbs.

HAving laid this foundation of our little Edifice by acquainting you with the kindes of Herbs, and their places, (for the trees, bushes and shrubs, are bigger, and so consequently easier to be found and known) I shall proceed to the building it self, and in it give you some delineations of their parts which the exactest Herberists divide into simular and dissimular. The simular are those five which are of one and the same substance, and cannot be divided into other parts; and because they have no proper names of their own, they doe by a kinde of Analogy borrow them from the parts of living creaturs, as 1. Flesh, 2. Nerves; 3. Veyns; 4. Skins; 5. Juice. Flesh is the more substantiall part of a plant, and doth many times admit of all dimensions, as in

Pears,

Peares, *Apples*, *Plums*, *Melons*, *Cucumbers*, and ſuch like fruits, the fleſh is that which is contained under the skin. Nerves and veines are by ſome comprehended under the name of *Fibres*, and are diſperſed throughout the whole plant, as Nerves and Veines are in living creatures which may eaſily be dis-joyned from the Fleſh, according to their longitude; but there is a difference betwixt them, for Nerves are ſmaller and dryer, but the Veins are greater, and being hollow, do contain in them that moiſture which gives nouriſhment to the Plants, which hollowneſſe, though it cannot eaſily be ſeen, yet it may be perceived by the juyce they ſend forth, which is ſometimes white, as in *Spurge*, *Sowthiſtles*, &c. ſometimes yellow, as in *Celandine*. The skin is that wherewith the ſtalks, boughes, leaves, fruits, and ſometimes the roots are covered, as with a thin garment. The juyce (which in this place doth comprehend alſo the teare) is anſwerable to the blood in living creatures; but the juyce

ſqueeſed

ſqueeſed out after pounding, the teare dropping out of its own accord. The diſſimular parts are thoſe wherein the ſimular parts are contained, which are likewiſe five, 1. Roots, 2. Stalks, 3. Leavs, 4. Flowers, 5. Seeds. The root is the lowermoſt part of a plant, which anſwers to the mouth in a man, and being faſtned in the earth, drawes convenient nouriſhment unto it, and ſupplieth all its parts. The Stalk is that part of a plant which riſeth up from the root, and is as it were a pipe to convey the nouriſhment, being more fully concocted, to the reſt of the parts, within which many times there is the pith, which conſiſts of fleſh, and ſometimes of fleſhy nerves and moiſture. The Leafe is that part of a Plant which is ſent forth from the main ſtalks by another leſſer ſtalk, and conſiſts of three ſimular parts, to wit, veyns, ſinnews, and fleſh. The Flower is the beauty of the Plant, ariſing from the moſt refined and concoctedſt matter, and therefore is moſt commonly of a different colour from

from the leaves, as yellow, blew, red, white, and ſometimes mixed. The Seed is that part of the Plant which is ended with a vitall faculty to bring forth its like, and it containes potentially the whole Plant in it: Theſe are the beſt definitions I could finde or invent, which I did the rather ſet down, becauſe I ſhall have occaſion to treat of the differences which ariſe from them, buteſpecially from the Roots, Stalks, Leaves, Flowers and Seeds, in ſome of which we ſhall now and then occaſionally ſhew you certain Dignoſticks, or Tokens whereby you may be infallibly informed how to diſtinguiſh one Herb from another.

CHAP.

CHAP. VIII.

Of the differences of Roots.

HErbs differ much in their Roots, whereof the figures of ſome are long, ſome round, ſome ſtraight, ſome crooked, ſome ſhallow, ſome deep, ſome bulbous, ſome like to externall formes, ſome ſoft, ſome hard, ſome hollow, ſome knotty, &c. Thoſe that are long, are *Parſnips*, *Carrots*, *Reddiſhes*, *Briony*. The round are, *Turneps*, *Potatoes*, *Onyons*. Some are ſtraight, as *Garden-Creſſes*, *Orage*, *Wormſeed*, *Muſtard*. Some crooked, as *Rocket*, *Spurge*, *Blewbottle*. Thoſe whoſe roots are but ſhallow, are *Chickweed*, *Moſſe*, *Liverwort*, *Stonecrop*. Thoſe that goe deep into the earth, are *Elecampane*, *Horſeraddiſh*, *Sorrell*, whoſe root goeth fartheſt into the earth of any Herb, inſomuch that it hath been known to go three cubits deep, as my Lord *Bacon* witneſſeth in his Naturall Hiſtory.

You ſhall ſee ſome Bulbous, as *Tulips*, *Daffadills*, *Garlick*, *Saffron*, *Hyacinths*. Some are like to externall formes, as the roots of *Aſphodel* to an *Acorne*, of *Palma Chriſti* to an Hand, of other, *Satyrians* to *Dogſtones*, *Goatſtones* &c. It is ſaid by ſome, that the Roots of *Solomons Seale*, are like a Seale, and therefore ſo called; but I thinke rather with Maſter *Gerrard*, that is from the wonderfull faculty it hath in ſealing up burſtneſſes, and green wounds. You ſhall have ſome roots hard, as the greater *Centaury*, *Gromwell*, *Parſly*, *Mallowes*. And ſome ſoft, as *Cabbage*, *Alexanders*, *Skirrits*, *Tragopogon*. Some are hollow, as *Radix Cava*, that is, *Hollowroot*. Others are knotty, as the roots of *Flower de luce*, *Piony*, *Eryngium*, &c. Some Plants there are, but rare, that have a moſſy, or downy root; and likewiſe that have a number of threds, like beards, as *Mandrakes*, whereof Witches and Impoſtors make an ugly Image, giving it the form of the face, at the top of the root, and leave thoſe

ſtrings

ſtrings to make a broad beard down to the feet. Alſo there is a kinde of *Nard* in *Crete* (being a kind of *Phu*) that hath a root hairy, like a rough-footed Dove's foot. And there is one herb flat at the bottome, and ſeemeth as if the nether part of its root were bit off, and is called *Devils bit*, whereof it is reported that the Devill knowing that that part of the root would cure all diſeaſes, out of his inveterate malice to mankinde, bites it off. *Henbane* and *Hemlock* have Roots ſo like a *Parſnip*, that they have been miſtaken for it, to the endangering of the lives of ſome.

CHAP. IX.

Of the differences of Stalkes.

SOme Differences are taken alſo from the Stalkes. All *Chickweeds*, (for there be many ſorts of them) if the ſtalkes be gently broken, you ſhall have in the middle of them a kinde

of Sinnew, by which you may know them from almoſt any Plants that grow. Stalkes are of divers Figures alſo, ſome have ſtraight ſtalkes, as *Beanes, Hemp, Flaxe, Nettles*; ſome are bending, as *Solomons Seale, Snapdragon, Mugwort, Mercury, Archangell*, &c. Others lye on the ground, as *Peaſe, Chickweed, Pennyroyall, Pinkes*. Others ſtand bolt upright, as *Throatwort, Clowns Allheale, Plowmans Spikenard*; Some ſpread into many branches, as *Vervaine, Larkſpurre, Smallage, Muſtard*; Other ſtalks have no branches, as *Woodroof, Satyrions, Naked Horſetaile*. And there be that wind one within another; as *Periwinkle, Bindweed, Tares*. Many of them have round ſtalks; as *Parſly, Hemlock, Tulips*: but ſome have angles or edges as the *Daffodill*, which hath two, *Cyperus graſſe three, Horehound, Goſegraſs*, &c. are four ſquare. Some, as *Orage, Beets, Rubarb, Colewoorts*, &c. have red ſtalkes, and ſome are white, and green. Some ſtalks are peckled, as *Dragons, Scorpion graſſe*, &c.

&c. *Mothmullen* and *Rose Campion* are downy; some have joynts and knuckles, as *Clove Gilleflowers*, *Pinks*, *Soapwort*, *Fennell*, *Corne*, *Reeds* and *Canes*. The stalks of the four last being dry are hollow. Some stalks are full of milk, as *Lettuce*, *Rampians*, *Sowthistle*, *Spurg*, &c. Some have a viscous matter adhering to it, as *Catchfly*, by which you distinguish it from the *Valerian* that is so like it.

CHAP. X.

Of the Differences of Leaves.

BUt of all the parts of Herbs, the Leaves afford us the greatest variety of Differences, yea they are so many, that it would puzzle a good head, to finde terms to expresse them by. As many as are obvious I shall set downe, and tell you that the reason of the names of some Herbes arise from their Leaves. *Arrowhead* is so called, because the Leafe of it

is like the head of a barbed Arrow. *Scurvygrass* is called *Spoonwort*, because the leaves of it represent the fashion of a spoon. *Plantane* is called *Ribwort*, because every Leafe hath five strings somewhat like Ribs. The *Sword Flag* is so called, for that the Leaves so neerly resemble a Sword, *Crow foot* the foot of a Crow. The Leaves of *Teazle* incloſing the Stalke, are Concavous, which receive the falling Rain, and retain it there, and is therefore called *Venus Baſon*. *Tragopogon* groweth like a *Goats* beard, and is therefore so named. *Twayblade* is so termed, for that it hath but two Leaves. *Trefoile* for that it hath three. *Herb Paris* hath foure. *Cinquefoile* five. *Heptaphyllon* seven. The Leaves of *Butterwort* feel as if melted Butter had been powred upon the Leaves. *Ros Solis*, or *Sundew* hath a Dew upon the Leaves at Noon, even in the hoteſt weather; Sheepherds call it the *Red Rot*, because it rotteth Sheep. Some Leaves have Sand about them alwaies, as *Mercury* and *Orage*. The Leaves

of

of all ſorts of *Scabious* break with ſmall ſtrings like haires in the middle, by which you may know it from *Knapweed*, which is otherwiſe very like it. *Saw wort* is ſo called, for that the Leaves are nicked like a Saw. The Leaves of *Pimpernill* are ſpeckled underneath. If you hold the Leaves of *Saint Johns Wort*, and *Saint Peters wort*, againſt the light you ſhall finde them perforated with holes like a Seive, the firſt more, the ſecond leſſe. *Butterburre* was ſo called, becauſe the Countrey Houſwives were wont to wrap their Butter in the large Leaves thereof. The Leaves of *Rheubarbe*, *Cabbage*, *Burdock*, &c. are alſo very large and roundiſh. Other *Docks*, *Tobacco*, *Elecampane*, &c. have Leaves long and large, but few. *Leadwort* hath Leaves of the colour of Lead, *Time*, *Rue*, *Aſparagus*, *Spignell*, *Fennell*, &c. hath many ſmall Leaves. Thoſe of *Orpine*, *Aloes* and *Houſeleek*, are thick and Oylie; *Stonecrop* hath Leaves long and round, almoſt as *Roſemary*. Some are more indented, as *Radiſh*, *Vervain*,

Dandelyon; some lesse, as *Mandlin*, *Althease*, *Tansy*, *Sneesswort*: *Aron* is smooth and spotted, *Arsmart* rough and spotted, and of this there be two sorts, biting and not biting, which may be discerned, if you lay a leafe over your tongue and break it. Some are onely rough, as *Comfrey*, *Teazle*, &c. *Bugloss* is so called, because it is rough like an Oxe tongue. Some are smooth and glib, as *Barsebreech*, called *Brank Vrsine*, *Mandrake*, &c. Many more differences I might adde, but Enough is as good as a Feast.

CHAP. XI.

Of the Differences of Flowers, according to their Times as well as Figures.

NEither are Flowers without very many great differences, some may be taken from the times of the yeare wherein they Flower, as the VVinter *Wolfsbane* is called *Christmas* flower, because

because it puts forth its blossomes about that time, and so doth the true black *Hellebore*. After these (and sometimes before if the Winter be milde) come *Primroses*, *Crocusses*, *Animonies*, *Heppaticaes*. The *Mezereon* tree blossomes early too, and so doe impatient *Ladysmocks*. In *February* you shall have *Violets*, *Daffodills*, *Wallflowers*, *Hyacynths*, *Scurvygrasse*, *Chickweed*, *Red Archangell*, &c. After *March* come *Cowslips*, *Daisies*, *Tulips*, *Starres of Bethlem*, &c. *April* brings *Flower de Luces*, *Woodbines*, *Cinamon Roses*, &c. *May* brings *Roses*, *Pinks*, *Whitsungilliflowers*, & then *Dropwort*, *Sheepherds needle* doe flower, &c. In *June*, *Meadsweet*, *Burnet*, *Lovage*, *Spignell*, *Larkspurre*, &c. In *July* come *Clove-Gilliflowers*, or as some will have them *Julyflowers*, *Holy Oakes*, &c. In *August*, *Clowns Allheale*, *Wintercherry*, &c. In *September* and afterwards, if the latter Spring be not hindered with cold weather, *Strawberries*, *Primroses*, and those which flower first, will flower againe. Flowers have all ex-

quisite Figures; *Stockgilliflowers* have seldome more then foure Leaves, and it is reported that they will sometimes have five, and that the Seeds of them being sown, will prove double, and therefore some tye a thred about them, that they may know how to preserve them for seed. Those which have five are *Larkspurres*, *Pinks*, *Primroses*, *Borage*, *Bugloss*, &c. Some have six, as the *Flower de Luce*, *White-Lillies*, &c. Those *Tulips* and *Anemonies*, are (by some) reckoned to be best which have most leaves. Some put forth a great multitude of Leaves, as *Marygolds*, *Trefoile*, &c. We see also that the Sockets and Supporters of Flowers are figured, as in the five Brethren of the *Rose*, whereof there is this common Riddle:

Five Brethren, all in one,
Three have beards, and two have none.

But to come to those that resemble the parts of liveing Creatures. The Flower of *Snapdragon*, and that of

Wilde

Wildeflaxe, which I take to be of the ſame kinde, is like the mouth of a Lyon, or rather like the ſnout of a Calf. The flower of the dead *Nettle*, is like a *Weaſells* face, and is called *Galleopſis*, which in Greek ſignifies the ſame. *Larkſpurre* hath a Flower with an heel like a *Larke*. The Flowers of *Peaſe*, *Vetches*, &c. are ſomewhat like a *Butterfly*, and there is a *Satyrion* which repreſents it very much. There is another *Satyrion* like a *Bee*, another like a *Waſpe*. Some Flowers, as the flower of the *Sunne*, *Marigolds*, *Wartwort*, *Mallowflowers* bow and incline themſelves towards the Sunne, which happeneth, becauſe that the part, againſt which the Sunne beateth, waxeth more faint and flaccide in the Stalke. Others open their Leaves when the Sun ſhineth, and againe in ſome part, cloſe them either towards Night, or when the Sunne is over-caſt; as *Marigolds*, *Tulips*, *Pimpernell*, &c. but *Goats beard*, contrary to theſe, is ſhut at Noon when the Sunne ſhineth, and is therefore called, *Go to bed at Noon*.

Some

Some represent *Bells*, some *Helmets*, some *Fingerstalls*, as *Foxgloves*. Some *Boxes* out of which *Dice* are cast, as *Fritillaria*. There be also Differences of Flowers of the same kinde, proceeding from the Colour, some white, some red, some yellow, some blew, some mixed, but especially in *Tulips*, of which there is the white and yellow *Crown*, the *Fools Coat*, the *Switzer*, the *Prince*, the *Mourning Widdow*, &c. There be *Anemonies*, *Gillowflowers*, &c. of severall colours. Some flowers grow double, as *Daisies*, *Larkspurres*, *Batchelors Buttons*, *Crowfoot*, &c.. *Coltsfoot* flowers before it putteth forth its Leaves, and there is a sort of *Willowerd*, which hath its flowers upon the Huske, wherein the Seed is contained, and is called in *Latine*, *Filius ante Patrem*, that is, *The Father before the Son*, because it is more usuall for an Herbe to Flower, before it Seed, but in this it is otherwise. I might be larger, but I feare I have exceeded already.

CHAP.

CHAP. XII.

Of the Differences of Seeds.

SEeds have also their Differences. The Seeds of all *Pulse* grow in *Cods*, and have severall formes, whereof one hath Seeds like a Kidney, and and is therefore called the *Kidney Beane*. Other Seeds grow in Husks, as *Oats*. Some grow in Eares, as *Pannick*, *Wheat*, *Rye*, *Barly*, &c. *Lavender* also, and *Plantaine* is spiked, but the Seeds of *Fennell*, *Parsnep*, *Parsly*, *Chervill*, *Hemlock*, *Carret*, &c. grow upon Umbles of Tufts. The seed of *Bulronack* resembles the Moon, which is therefore called *Great Moonwort*, and this Seed is contained in a Huske like unto white Sattin, which is the name of it, though our Women call it *Honesty*. The Herbe *Cranesbill* is so called, because the Seeds are like a *Cranes* Bill. *Shepherds purse* is so called, because the Seeds of it resemble the Leatherne bagge, wherein Shepherds

herds put their Victuals. *Sheepherds Needle* hath Seeds like Needles. Some grow in knaps like Bottles, as *Knap-weed*, which some call *Darbottle*, *Blewbottle*, great *Centaury*, &c. Some in Berries, as those of *Tu'sin*. *Gromwell* hath a Seed, as hard as a Stone, and for that reason the Greeks call it *Lithospermon*. Some Seeds are very rough, and will stick to the Garments of those that passe by, as those of *Burdock*, *Agrimony*, *Hounds tongue*, *Clevers*. Some have a kinde of Down fastned to them, which the Winde bloweth away together with the seed, as *Coltsfoot*, *Dandelyon* and some Thistles. If the Downe flyeth off when there is no Winde, it is a signe of Rain. Some Seeds are comprehended within the flesh of fruits, as *Cucumbers*, *Melons*, *Pompeions*, &c. The colours of of Seeds are commonly white, reddish, or black. Most Seeds in the growing leave their Husks or Rind about the Root: But the Onyon will carry it up, so that it will be like a Cap upon the top of the young Onyon. There is a

Plant

Plant called *Noli me tangere*, neer which if you put your hand, the Seed will ſpurtle forth ſuddenly, in ſo much that the unexpectedneſſe of it made the valiant Lord *Fairfax* to ſtart, as Maſter *Robert* at the Phyſick Garden in *Oxford* can tell you. The Seeds of *Cotton* are encompaſſed about with white Wool: they are in ſhape like the trettles or dung of a Coney.

CHAP. XIII.

Of the Excreſences of Plants.

BEſides theſe Common parts of Plants, there be ſome Excreſcences which are more proper, and reſtrained to a few, and theſe doe commonly belong to Trees and Buſhes, which I have made little mention of, becauſe they are more obvious, but for as much as theſe which I ſhall ſpeak of are leſſe known, I have thought fit to put them down in this place. There is a kinde of Sponge of a dusky brown colour,

colour, commonly called *Jewes eare*, growing at the roots of Trees, but especially on the *Elder*, on which Tree some thinke *Judas* hanged himselfe, and therefore this Sponge in Latine is called *Auricula Juda*. It hath a strange property, for being put into warme water, it swelleth and openeth extreamly, and is usefull for curing Squinances, and Inflammations of the Throat. *Agarick* also, is a kinde of Spongy Excrescence growing upon the tops of Oaks and other Trees, in the nature of a *Mushrome*, though it be affirmed by some, that it groweth also at the Roots. It is famous in Physick for Purging, of tough Flegme, and for opening the Liver, but it is offensive to the Stomach, you may have it at the Apothecaries. Another thing which hath a strange kinde of growth is *Misseltoe*, which is found to put forth, not onely upon, but sometimes also underneath the boughs of Crabtrees, Appletrees, and Hazles; the rarest groweth upon the Oakes, and is counted very medicinall, as also the

Po-

Polipode. I believe the thing it selfe is better knowne, then the manner of its growing, because it is carryed many miles to set up in houses about Christmas time, when it is adorned with a white glistering berry. A man may count the prickles of Plants to be a kinde of Excrescence, for they will never be Boughs, nor bear Leaves. Some have prickles upon their boughs, and those are black and white *Thorns*, *Bryar Rose*, *Raspetrees*, *Crabtree*, *Gooseberry*, *Barbery*, &c. Others have prickles upon their Leaves, as *Holly*, *Juniper*, *Furze*, *Thistles*; *Nettles* also, and *Borage* have prickles, the one venomous, the other harmlesse. Another kinde of Excrescence is an Exudation of Plants joyned with Putrefaction, as we see in things like *Apples*, which are chiefly found upon the Leaves of *Oaks*, and sometimes upon *Willowes:* There is a kinde of prediction amongst Countrey people, that if the Oake apple broken be full of Wormes (as sometimes it is) it is a signe of a Pestilent yeare, which is probable, because

cauſe they grow of Corruption. Of all Trees, none doth bear more Excreſcences then the *Oak*, for beſides the *Miſletoe*, *Polipode*, *Oak apples*, and *Acornes*, which are the naturall fruit, it beareth *Galls* and *Oake nuts*, which are inflammable and certaine *Oake* berries, which ſtick to the Tree without ſtalke. There is alſo upon the wilde *Bryar* a Moſſy tuft of divers colours, very eaſie to be ſeene in the Winter when the leaves are off, which if you cut in ſunder, you ſhall finde them full of little white wormes, which in the Summer time are changed into the Fly *Cantharides*. The *Birch* Tree, the *Nut*, the *Wallnut*, and the *Planetrees*, have on them things in Greek, called *Cachryes*, in Engliſh *Catkines*, or *Catſtailes*, if I miſtake not, which are there the moſt part of VVinter. They are of a burning quality in Phyſick. There is a Moſſe the Perfumers have, which cometh out of *Appletrees* of an excellent ſent.

CHAP.

CHAP. XIV.

Of Smells and Taſts in Plants, and their Differences.

AND becauſe there be ſome Differences in Plants, which ariſe from the Smells and Taſtes, I ſhall take the paines to preſent you with ſome of them. There is a Tree called *Arbor vitæ*, or *Tree of Life*, whoſe Leaves being ſqueeſed between ones fingers, ſmell like unto Bread and Cheeſe. The ſmell of *Burnet* is like to that of a *Cucumber*. Stinking *Orage* ſmells like *Old Ling*, and ſomewhat elſe. The ſmell of *Croſſewort* is like unto *Hony*, but ſomewhat faint. There is a kinde of *willoweed*, and that very common, which ſmells like *Codled Apples*. The *Paſque* flower, called in Latine *Pulſatilla*, will bite you by the Noſe, if you rub it between your fingers and ſmell to it, and ſo will *Gentian* or *Felwort*. The leaves of *Coriander* doe ſmell very ſtrong,

and

and ſo doe thoſe of *Smallage*, *Wormwood*, *Rue*, *Hemlock*, *Henbane*, &c. *Sweet Maudlin*, *Marjoram*, *Muſcavy*, &c. are known by their ſweet ſmells. You can ſcarce diſtinguiſh between *Camomell* and young *Mayweed*, but by the ſmell. The root of the little *Valerian* is ſweet like unto *Muske*. It is reported that ſweet *Moſſe*, beſides that upon the *Appletrees*, groweth likewiſe ſometimes upon the *Poplar*: So much for the Smells, I come now to the Taſte. *Spatula fœtida*, or ſinking *Gladwin*, hath a taſte like unto *Roſt Beef*. The ſtalke of the great *Waterdock* taſtes like *Green ſawce*, and is alſo as pleaſant to eate as the beſt *Sorrell*. *Earthnuts*, or as ſome call them *Pignuts*, taſte ſomewhat like other nuts. The leaves of the *Vine* and *Barbery buſh* taſte like *Sorrell*. *Rocket* taſtes like *Milke* that is burnt too. *Arum* or *Cuckopint* is of a very biting taſte, and ſo is *Spearwort*, or *Water Crowfoot*, biting *Arſmart*, &c. Some Plants ſmell little, but taſte very bitter, as *Aloes*, *Lavender*,

der, *Cotton*, the leſſer *Centaury*, &c. Some have a biting taſte, but ſomewhat pleaſant, as *Creſſes*, *Garden Ginger*, *Tarragon*, &c. *Seaweed*, *Samphire*, *Scurvygraſſe*, &c. doe participate of ſaltneſſe. There be fruits that are ſweet before they are ripe, as *Mirabolanes*; So *Fennell* ſeeds are ſweet before they ripen, and afterwards grow Spicie. And ſome never ripen to be ſweet, as *Tamarinds*, *Lemmons*, *Barberies*, *Crabs*, *Sloes*, &c. Some are very acrimonious, as *Euphorbium*, *Celandine*, *Sowthiſtles*, *Spurge*, *Old Lettice*, Figs from the Tree, &c. There is a kinde of *Wormwood* ſo like *Lavender*, that it cannot be known from it, but by the ſmell and taſte.

CHAP.

CHAP. XV.

Of the juices of Plants.

NEither will it be amiſſe now we are ſpeaking of the Dignoſticks of Plants, to ſay ſomewhat more particularly of the Juices alſo, from whence the knowledge of ſome of them is derived. Though the colour of moſt of them be green, or of a watriſh colour, yet ſome of them are of other colours alſo; as the juices of *Figs*, old *Lettuce*, *Sowthiſtle*, *Spurge*, &c. are as white as Milk, and are commonly ſo called: And here we may obſerve the difference between *Spurge* and *Wild flax*, which are ſomewhat alike, but that hath milk, the other none, according to the riming Verſe,

Eſula lacte ſcit ſine lacte Linaria creſcit.

Euphorbium hath a kinde of milk too, though not very white: And *Celandine*

dine hath a yellow milk, which will iſſue forth if it be but broken. There is hardly found a Plant that yeildeth a red juice, either in the blade or eare, except it be the tree that beareth *Sanguis Draconis*, which groweth chiefly in the Iſland *Soquotra*, after the forme of a Sugar-loafe. It is likely that the ſap of that Plant doth concoct in the body of the Tree; for we ſee that *Grapes* and *Pomgranates* are red in the Juice, but green in the Tear: the herb *Amaranthus* (indeed) is red all over, and *Baſil* is red in the wood, and ſo is red *Sanders*, but the juice of neither of them is ſo; the juices of Flowers are commonly of the ſame colour with the flowers which are of a more refined and concocted matter than the ſtalkes, yet the juices of Fruits are not alwaies ſo; for there be black *Plummes* and red *Apples*, neither of which have a black or red juice.

CHAP.

CHAP. II.

Of the use of Plants, and first, of of those which are Alimentall.

THe uſes of Plants, are reckoned up, would ſwell into a volume; but I ſhall indeavour to reduce them to as few heads as I can, and begin firſt with thoſe that are Alimentall: And here I ſhall not ſumme up thoſe that are commonly uſed for *Aliment*, as *Turnips*, *Carrets*, *Cabbage*, &c. but thoſe which are leſſe known, yea ſuch as Countrey people will ſcarce venter to eat: the tops of *Hops* and *Turnips* running up to ſeed, boyled and buttered, do eat like *Aſparagus*: the buds of *Broom* being pickled are of an excellent reliſh: the roots of *Tulips* boyled and buttered make a rare diſh. There be ſeverall wayes of dreſſing *Muſhromes* to make them edible; the leaves and ſtalkes of *Alexanders* being boyled, are eaten alone, or with Fiſh

Fiſh to correct them; the ſtalks are preſerved raw in pickle, and preſented to the table for a curious Sallet: The root of *Arum* being raw, is exceeding biting, but being boyled it is good food. The roots of *Tragopogon*, or *Goats beard*, boyled and buttered, as *Parſnips* and *Carrets*, are farre better: *Aſhweed*, which ſome call *Jump about* boyled with Bacon when it is young, is a timely diſh, and ſo is young *Comfrey*: *Lambs lettuce*, or *Corn ſallet* is the earlieſt thing that I know eaten raw: *Penniroyall* chopped & put into a bag-pudding giveth it a ſavoury reliſh: With the buds of *Elders*, *Nettle* tops, *Watercreſſes* and *Alexanders*, good women uſe to make pottage with in the Spring time: *Horſeradiſh* root ſliced thin with a little *Vinegar*, is a wholſome ſauce with Mutton, & ſo are the leaves of *Jack by the hedge*, which therefore by ſome call'd Sawce alone. And if you will have any more, you muſt go to the Cooks, who can make many more diſhes out of them. yea, they can make good broath with the

leg of a joynſtoole, if you allow them coſt. But even ſome of thoſe herbes which are not *eſculent*, are notwithſtanding *poculent*, as *Hops*, *Broom*, *Angelica*, *Bawme*, &c. which give a dainty reliſh to liquor, if they be boyled therein. For diſtilled Waters, you may have *Anniſeed*, *Mint*, *Angelica*, &c. Though Plants are not now reckoned of ſo good nouriſhment as Fleſh, yet the *Pythagorean Philoſophers* lived longer than any in theſe dayes doe.

CHAP.

CHAP. XVII.

Of the Phyſicall uſe of Plants.

HEnce I might enter upon a plentifull Harveſt, but I ſhall onely glean out ſome of the chiefeſt Simples that *England* affords, adjoyning ſome of their vertues. *Licoriſh* and *Saffron* are two things, whereof without diſpute our Engliſh are the beſt. *Licoriſh* boyled in faire water, with *Maidenhaire* and *Figs*, maketh a very good dyet drinke for thoſe which are troubled with a dry Cough, or any griefe of the *Breaſt* and *Lungs*; *Saffron* ſtrengthens the *Heart* exceedingly, quickneth the *Braine*, helps Conſumptions of the *Lungs*, difficulty of breathing, and is good to make ſtayes to put to the throats of them that have the *ſmall Poxe*. And as I take it, the beſt *Elecampane* grows in *England*, the roots of which being candied with Sugar, helps the *Cough*, ſhortneſſe of *Breath*, and wheeſing in

the *Lungs*. Many other Plants that grow here alſo, are as good as the Tranſmarine, though the Druggiſts extoll the outlandiſh, that they may gaine thereby the more. Our *Rubarbe* is nothing inferiour to that which comes out of *China*, and in proceſſe of time will be as famous: It purgeth the body of *Cholar* and *Phlegme*, and put amongſt other Ingredients, cleanſeth the *Stomach*, *Liver*, and *Blood*. Our *Angelica* is as good as that of *Norway* and *Ireland*: It is very Soveraigne againſt *Poyſon* and the *Plague*, and ſo is the Water of the Herbe *Dragons*. Our *Gentian* is as good as that which is brought from beyond Sea, though perhaps it groweth more plentifully in *Italy* and in other places, but *England* is before all other Countreyes famous for its plenty of *Saxifrage*: we have *Maidenhaire* here alſo, never a whit inferiour to the *Aſſyrian*. Other Phyſicall herbes are *Aſara Bacca*, which purgeth upwards and downwards. *Scordium*, of which *Diaſcordium* is made, and given to ſtrengthen

ſtrengthen the Heart and Stomach, which it doth exceedingly. *Woodſorrell* cools the Bloud, helps ulcers in the Mouth, hot defluxtions upon the Lungs, &c. *Marſhmallowes* eaſe the paine of the Stone. *Pimpernill* drawes thornes and ſplinters out of the fl ſh. *Smallage* provok s the *Termes*, and is ſingular good againſt the *yellow Jaundice*. *Ceterach* helps the ſtrangury, and ſo doth *Dropwort*. *Dwarfe Elder* inwardly taken, is a ſingular Purge for the *Dropſie* and *Gout*: *Fennell* increaſeth *Milke* in *Nurſes*. *Fumitory* boyled in *Whitewine*, and taken inwardly, helps ſuch as are *Itchy* and *Scabbed*. *Does foot* helps the *Wine Collick*, *Periwinckle* cures the *Cramp*, *Plantane* leaves are excellent for green wounds, the roots for the *Headeck*, *Pious Roots* and Seeds are good against the *Cramp*, and *Falling ſickneſſe*; *Sheepherds purſe* ſtoppeth blood; *Houſeleek* is good againſt the *Shingles*. The leſſer *Centaury*, *Wormwood*, *Garlick*, *Lavender Cotton*, and all Plants that have a bitter juce kill the wormes. Let thus much ſuffice

in brief concerning the Internall, or Phyſicall uſe of Plants.

CHAP. XVIII.

Of the Chirurgicall uſe of Plants.

COnſidering how ſubject the body of Man is to be wounded, and troubled with ſeverall Maladies, as *Felons*, *Whitloes*, *Itch*, *Scabbs*, &c. And becauſe there is leſſe prejudice in applying things outwardly then inwardly; I ſhall here inſiſt upon the vertues of ſome Herbes that are uſefull upon this account, & incourage thoſe which are in no great danger to uſe them, but in dangerous Caſes, if a good Chirather to his daily experience, then be *Penny wiſe, and Pound fooliſh.* A Sheep many times periſheth for want of an halfe penny worth of Tarre, and one ſparke ſometimes ſets a Town on fire, therefore neglect not the ſmalleſt

ſmalleſt wounds, but apply ſome of theſe eaſie remedies which follow: The Juyce or Water of *Flaxweed* put into foule Ulcers, whether they be Cankerous or Fiſtulous, with Tents rowled therein, or the parts waſhed or injected therewith, cleanſeth them throughly from the bottome, and healeth them up ſafely. The whole Plant of the greater *Centaury*, as well Herbe as Root, is very availeable in all ſorts of VVounds or Ulcers, to dry, ſoder, clenſe and heale them, and therefore it is, or ſhould be, a principall Ingredient, in all vulnerary drinks and injections. *Knapweed*, which ſome call *Darbbotle*, is good for all thoſe that are bruiſed by any falls, beatings, and other caſualties: It is very profitable for them that are burſten, if they drinke the decoction of the Herbe and Root in Wine, and apply the ſame outwardly to the place; it is ſingular good alſo in all ſorts of running and Cankerous ſores and Fiſtulaes, drying up the moiſture, and healing them gently, without any

ſharpneſſe or biting, it doth the like alſo in the running ſores and Scabs of the Head or other parts: it is of eſpecial uſe for the ſoreneſs of the Throat, the ſwellings of the Palate and Jawes: it is alſo excellent for all green wounds, to ſtay the bleeding, and cloſe the Lips of them together. All the *Plantanes*, are ſinguler good *Woundherbs* to heale freſh and old ſores and wounds, whether inward or outward. The flower of *Beanes* and *Fenugreek* mixed with *Hony*, helpeth *Felons*, *Boiles* and *Bruiſes*. The roots of white *Briony* being bruiſed and applyed of it ſelfe, to any place where the bones are broken, helpeth to draw them forth, as alſo *Splinters*, *Arrowheads* and *Thornes* in the fleſh, and being applyed with a little *Wine* mixed therewith, it breaketh *Boyles* and helpeth *Whitloes*. The Berries of *Bitterſweet*, or *Woody Nightſhade* bruiſed, and laid to the finger that hath a *Felon* thereon, cure it, and ſo doe the Leaves ſtamped together with reſty *Bacon*. He that hath *Sanicle* and

Selfe.

Selfe-heale to helpe himſelfe, needeth neither *Phyſitian* nor *Chirurgion*, ſo effectuall are they in ſeverall caſes, but eſpecially in green wounds. *Hounds tongue* is good againſt the biting of mad Doggs, and is the maine ingredient whereof black ſalve is made. The inner barke of an *Elder tree* boiled in *Vinegar*, is approved to cure the *Itch*, and take away *Scabs*, and ſo are Decoctions of *Scabious* and *Alehoof* or *Ground Ivy*. The fume of the dryed Herb, Stalk and Seeds of *Henbane* burned, quickly healeth *Swellings*, *Chilblaines* or *Kibes* on the hands or feet if they be held therein. *Savine* dryed into a powder and mixed with Honey, breaketh *Carbunkles* and *Plague Sores*; it alſo helpeth the *Kings Evill*, being applyed unto the place; being ſpread upon a piece of Leather, and applyed to the Navell, kills the wormes in the Belly, it helps *Scabs*, *Itch*, running *Sores*, *Cankers*, *Tetters* and *Ringwormes*. An hundred more I could reckon up, but let theſe ſuffice for the preſent.

CHAP. XIX.

Of Poysonous Plants.

WHatsoever is received into the Body, is either *Aliment*, *Medicine* or *Poyson*. Of the two first I have intreated already, I come now to the third: And here I know not whether to call it a civill, or rather uncivill use or abuse, that hath been made of Plants in this kinde. The forme of executing capitall offenders in *Athens* was, the taking of the potion of *Hemlock*, which was (forsooth as they pretended) in humanity given to them, that their deaths might be with the lesse paine, and after this manner did *Socrates* dye. The Inhabitants of the Isle of *Cæa*, when they were above threescores yeares old, and deemed unfit for the managery of publick affaires, did voluntarily take the like potion. Some have used *Opium* (which is the juyce of a certaine *Poppy*) to the same purpose, but that

is more painfull, becauſe it hath parts of heat mixed. The juyces of *Garlick*, *Onyons* and *Leeks*, if taken in any great quantity are rank Poyſon, although we eate the fleſh and all with little or no danger. *Lettuce* is thought to be poyſonous when it is ſo old as to have Milke. *Spurge* is a kinde of Poyſon it ſelfe, and ſo is *Nightſhade*, *Henbane*, *Mandrake*, *Wolfsbane*; of which Maſter *Gerrard* reports, that a Gentleman taſting the roots, had his tongue and mouth ſo ſwolne, that it is thought he would have dyed, if he had not met with preſent helpe. The *Yewtree* is venimous, both to Man and Beaſts. That it is poyſon to Kine will appear by what followeth. Maſter *Wells* Miniſter at *Adderbury* in *Oxfordſhire*, ſeeing ſome Boyes breaking Boughs from the *Yew Tree* in the Church-yard, thought himſelfe much injured. To prevent the like Treſpaſſes, he ſent one preſently to cut downe the Tree, and to bring it into his backſide. This being done, his Cowes began to feed upon the

Leaves

Leaves, and two of them within few houres dyed. A juſt reward.

CHAP. XX.

Plants for making Cloth Cordage, &c.

SO much for the Internall uſes of Plants, come we now to the Externall: And becauſe thoſe which ſerve for cloathing, are moſt neceſſary, we will ſpeak of them firſt. There be of Plants which are uſed for Garments, theſe that follow, *Hemp* and *Flaxe* grow commonly in *England*, and are made into cloth by the good Houſewifes of every Countrey. *Cotton* is not ſo well knowne, becauſe it grows beyond the Seas, as in *India*, *Arabia*, *Ægipt*, &c. It is an annuall Plant as *Hemp*, and unleſſe it be gathered in time, the Seeds with the Wool encompaſſing them fall to the ground. Of this are made *Fuſtions*, *Bombaſts*, *Stockins*, &c. In ſome Countreyes

treyes for want of the aforesaid Materialls, they strip the *Nettles* and make Cloth thereof, which must needs be very course. But finer stuffe is made of *Sericum*, which is a growing silke comeing out of the Iland *Seres*, where it growes upon the Leaves of Trees, yet some is made by the silke wormes in every Countrey. They make also Cables of the barke of *Lime Trees*. And here I thinke it will not be impertinent to our present matter, to give you to understand that in *India* there is a Tree called the *Cokarnut* tree, whose Leaves serve to cover houses, whose hairy stuff or hards which is next the outward bark doth make, not onely Cordage and Tackle for Ships, but also cloth, Caules, and Girdles, even for the better sort. There is in the Anatomy School at *Oxford*, amongst very many curious rarities, a Purse made of the barke of a certaine outlandish Tree.

CHAP.

CHAP. XXI.

Of the Ornamentall uſe of Plants formerly, and what are in uſe at this preſent.

PLants are an Ornament to the place where they naturally grow; How bravely are the Woods adorned with Trees, and the Meadows with Flowers, the Gardens with ſweet ſmelling Herbes, the Walls and Houſe ſides with Vines and other fruitfull Trees, inſomuch that the Pſalmiſt tells the bleſſed man, *That his Wife ſhall be as the fruitfull Vine on the ſides of his houſe, and his Children ſhall ſtand like Olive branches round about his Table.* The Olive was the Embleme of peace, and therefore the door for the entring in of the Oracle in *Solomons* Temple, were made of Olive trees, and ſo were the Lintells and Sideposts, it being a time of peace. I know not whether the *Athenians* did adorne their Temples with the branches of the Olive

Olive alſo, but ſurely they had it in ſo great veneration, that they would not ſuffer a Goat to come into the *Acropolis* where it grew. It is probable enough, that the Temple of *Minerva*, to whom it was ſacred, was ſometimes dreſſed with it. O her Heathens alſo, did garniſh their Temples with *Laurell*, *Mirtle*, *Oake*, &c. The branches of *Pines*, *Oakes* and *Appletrees*, and alſo *Parſly* were beſtowed upon thoſe that overcame in the *Grecian* games in token of Victory. So the *Roman* Combatants that overcame, received by way of reward a Garland or Coronet of *Palme tree*. The reaſon why the *Palme tree*, rather then any other Tree, ſhould be given in token of Victory, is rendered by divers approved Authors to be this, becauſe the *Palme tree*, though you put never ſo ponderous a heavy weight upon it, yet it will not yeild, but rather endeavour the more upward. Their Generalls alſo in their Triumphs heretofore wore a Crown of *Laurell*, and when they had raiſed any Siege, they

they were honoured with a Crown of *Graſſe*. In *Ouids* time, the Emperour had alwaies ſtanding before his Gates, an *Oake tree* in the midſt of two *Laurels*, as an Embleme denoting two worthy vertues, required in all Emperors and Princes; firſt, whereby the Enemy might be conquered; ſecondly, ſuch whereby Citizens might be ſaved. Unto this the Poet ſeemeth to allude ſpeaking of the *Laurell* tree;

Poſtibus Auguſtis eadem fidiſſima Cuſtos
Ante fores ſtatis, mediamque tuebere quercum.

It is not very long ſince the cuſtome of ſeting up Garlands in Churches, hath been left off with us; and in ſome places ſetting up of *Holly*, *Ivy*, *Roſemary*, *Bayes*, *Yew*, &c. in Churches at Chriſtmas, is ſtill in uſe. *Cypreſſe* Garlands are of great account at Funeralls amongſt the gentiler ſort, but *Roſemary* and *Bayes* are uſed by the Commons both at Funeralls and Weddings.

Weddings. They are all Plants which fade not a good while after they are gathered and uſed (as I conceive) to intimate unto us, that the remembrance of the preſent ſolemnity might not dye preſently, but be kept in minde for many yeares. *Box* and *Ivy* laſt long green, and therefore Vintners make their Garlands thereof; though perhaps *Ivy* is the rather uſed becauſe of the Antipathy betweene it and *Wine*, the *Willow* Garland is a thing talked of, but I had rather talke of it then weare it.

- CHAP.

CHAP. XXII.

Of Plants uſed in and againſt Witchcraft.

THe Oyntment that Witches uſe is reported to be made of the fat of Children digged out of their graves; of the Juices of *Smallage*, *Woolfsbaine* and *Cinquefoyle* mingled with the meale of fine Wheat. But ſome ſuppoſe that the ſoporiferous Medicines are likelieſt to doe it, which are *Henbane*, *Hemlock*, *Mandrake*, *Nightſhade*, *Tobacco*, *Opium*, *Saffron*, *Poplar Leaves*, *&c.* They take likewiſe the roots of *Mandrake*, according to ſome, or as I rather ſuppoſe the roots of *Briony*, which ſimple folke take for the true *Mandrake*, and make thereof an ugly Image, by which they repreſent the perſon on whom they intend to exerciſe their VVitchcraft. Many odde wives fables are written of *Vervaine*, which you may read elſewhere, as Maſter *Gerrard* ſaith. Thoſe that

that are uſed againſt VVitchcraft, are *Miſletoe* which if one hang about their neck, the VVitches can have no power of him. The roots of *Angelica* doe likewiſe availe much in the ſame caſe, if a man carry them about him, as *Fuchſius* ſaith. The common people formerly gathered the Leaves of *Elder* upon the laſt day of *Aprill*, which to diſappoint the Charmes of VVitches, they had affixed to their Doores and VVindowes, *Matthiolus* ſaith, that *Herba Paris* takes away evill done by VVitchcraft, and affirms that he knew it to be true by experience. I doe not deſire any to pin their Faiths upon theſe reports, but onely let them know that there are ſuch which they may believe as they pleaſe. However there is no queſtion but very wonderfull Effects may be wrought by the Vertues which are enveloped within the compaſſe of the green Mantles, wherewith many Plants are adorned.

CHAP.

CHAP. XXIII.

Other Traditions concerning Plants.

IT hath beene credibly reported to me, from ſeverall hands that if a man take an *Elder* ſtick, and cut it on both ſides, ſo that he preſerve the joynt, and put in his Pocket when he rides a journey, he ſhall never gall. It is likewiſe ſaid, that if a handfull of *Arſmart* be put under the Saddle, upon a tired horſeback, it will make him travaile freſh and luſtily. And if a Footman take *Mugwort* and put into his Shoos in the Morning, he may goe forty Miles before Noon and not be [illegible]. *Moonwort* will open Locks and pull off the Shooes of the Horſe feet that paſſe over it. I have heard that if Maids will take wilde *Tanſey*, and lay it to ſoak in Buttermilke for the ſpace of nine dayes, and waſh their faces therewith, it will make them look very

very faire; and that *Spurge*, *Laurell*, if the Leaves be broken off upwards, will cauſe vomiting, if downwards Purging: And that the ſeeds of *Parſly* being eaten cauſe the Falling ſickneſſe. The roots of *Tarragon* & *Pellitory* of *Spaine* held between the Teeth, will make them leave aking. It hath been long received and confirmed by divers trialls, that the root of *Male Piony* dryed, tied to the Neck, doth help the *Incubus* which we call the *Mare*. It is thought that *Caſtoreum*, *Muske*, *Rue* Seed, and *Agnus* Seed would doe the ſame. It hath been obſerved, that if a Woman with childe eate *Quinces* much, and *Coriander* Seed (the nature of both which is to repreſſe and ſtay Vapours that aſcend to the braine) it will make the childe ingenious: And on the contrary ſide, if the Mother eate much *Onyons* or *Beanes*, or ſuch vaporous food, it endangereth the Childe to become Lunatick, or of imperfect memory. The Leafe of the greater *Bardock* borne or laide on the top of the head, doth draw the Ma-

trix

trix upwards; but laid under the soles of the feet, it draweth it downward, which is a notable remedy against the Suffocations, falling and displacing of the Matrix. I have seen a Man lay the Leaves aforesaid, to the Soles of his Feet to cure him of the Gout. All kinde of *Docks* have this property, that what Flesh or Meat is sod therewith, though it be never so old, hard or tough, it will become tender and meet to be eaten. *Calamint* will recover stinking Meat, if it be laid amongst it whilst it is raw. The often smelling to *Basil* breedeth a *Scorpion* in the Brain. The Seed of *Fleabane* strewed between the Sheets causeth Chastity. *Boemus* relates, that in *Darien* in *America*, the Women eate an herb when they are great with childe, which makes them to bring forth without paine. Sowbread is dangerous for VVomen with child, yea so dangerous, that both *Dioscorides* and *Pliny* say, it will make a Woman miscarry if she doe but stride over it, whereby I conceive it may be usefull for Women that

that are in travaile, and cannot eaſily be delivered. If one that hath eaten *Comin* doe but breath on a painted face, the colour will vaniſh away ſtraight. If a man gather *Vervaine* the firſt day of the New Moon, before Sun riſing, and drinke the juyce thereof, it will make him to avoid Luſt for ſeven yeares. The Seeds of *Docks* tyed to the left arme of a Woman, doe helpe Barrenneſſe. I could reckon up many more Traditions to ſuch purpoſes as theſe concerning Plants, but I will not venter to treſpaſs any further upon the Readers patience. Thus have I done with the Walls of our Cottage, I ſhall now proceed to the Roof.

CHAP.

CHAP. XXIV.

Obſervations for the ſetting of Plants.

THe Dignoſticks and Uſes being thus demonſtrated, it is poſſible that ſome one may be induced to wiſh for ſome Directions for the improvement of his Garden, to whom eſpecially, but conſequently to others, I ſhall continue my Diſcourſe. I am no Gardiner, nor no Gardiners Sonne, yet I hope the Gardiners will not be angry with me, if I ſet downe a few Directions for the more convenient placing of Plants in a Garden. It hath been found by wofull experience, that Toades doe oftentimes lye amongſt *Sage*; it would therefore be good to Plant one ſlip of *Sage*, and another of *Rue*, for Toades will by no meanes come nigh unto *Rue*. When you ſet *Cabbage Plants*, make not the hole you ſet them in downe right but ſloaping, ſo will they more probably come

come to be *Cabbages*. It is ſaid that if *Potado* Roots be ſet in a Pot filled with Earth, and then the pot with Earth be ſet likewiſe within the ground ſome two or three inches, the Roots will grow greater then ordinary: if Onyons be taken out of the Earth and laid a drying twenty dayes and ſet againe they will be a great deale bigger. The cutting of the leaves of *Radiſh* or other roots in the beginning of Winter before they wither, and covering againe the Root ſomewhat high with Earth, will preſerve the Root and make it bigger in the Spring following. *Rene* doth proſper much and become ſtronger, if it be ſet by a *Figtree*, but if it be ſet by *Cole-Worts* it will not thrive. Shade to ſome plants conduceth to make them large and proſperous more then the Sunne. As in *Strawberries* and *Bayes* &c. Therefore among *Strawberries* ſow here and there ſome *Borage* ſeed, and you ſhall finde the *Strawberries* under thoſe leaves farre more large then their fellowes. And *Bayes* you muſt

plant to the North, or defend them from the Sunne by a Hedgerow; and when you ſow the Berries, weed not the Borders for the firſt halfe yeare, for the Weeds give them ſhade. *Scordium* likewiſe delighteth to grow in cool and ſhadowy places, and is found neer River ſides. If *Roots*, *Peaſe*, *Strawberries* and *Flowers*, may be accelerated in their coming and ripening (as queſtionleſſe they may, by making a Hot bed with Horſedung, and caſting Earth thereon) there would ariſe a double profit; the one in the high price that thoſe things beare which come early, the other in the ſwiftneſs of their returnes. For in ſome grounds which are ſtrong, you ſhall have *Radiſhes*, &c. come in a month, that in other grounds will not come in two, and ſo make double returnes: Or if you water them once in two or three dayes, with water whereinSheeps dung, or Pigeons dung hath been ſteeped, they will come the ſooner. Some plants will not grow neer one another, not that there is any Antipathy in themſelves,

ſelves, but becauſe they draw the ſame juyce, and ſo deceive one another, as the *Vine* and *Coleworts*, a *Reed* and a *Brake*, *Hemlock* and *Rue*; therefore it would not be amiſſe to ſet Plants of as contrary juyce as you can together. You muſt take heed of ſuffering great trees to grow in your Gardens, for beſides the droppings of the trees, which moſt Plants will not abide, they ſo ſoak and exhauſt it, that they hurt all Plants that grow by them, eſpecially *Aſhes*, and ſuch trees as ſpread the roots neer the top of the ground. He that deſires to be ſatisfied further, that there is no Sympathy nor Antipathy in Plants, let him read the Naturall Hiſtory of the famous and experienced Lord *Bacon*, who hath treated very judiciouſly on this Subject, of whom I confeſſe I have made uſe in ſeveral places of this Treatiſe, but eſpecially in this Chapter.

CHAP XXV.

Directions for the gathering of Plants, and keeping them after they are gathered.

AND now I have done with the ſetting of Plants, give me leave to ſpeak ſomewhat of the gathering of them alſo. Some of the ancient, & divers modern Phyſitians, and Aſtrologians, have acquainted us with a ſympathy betweene the Sun, Moone, the reſt of the Planets, ſome principall fixed Stars, & certaine Plants; (for from the influence of thoſe ſuperiour Bodies, are the inferiour Vegetables, &c. furniſht with their occult qualities.) and many other learned men have either defended or favoured this opinion; divers late Phyſitians of other Countries (famous for the viſible maſtery they had over diſeaſes) were not onely ſtudious to underſtand, and did ſtrictly obſerve the times of collecting their Plants for phyſical

ſical uſes, but uſed onely thoſe compoſitions which their Apothecaries made up, at certain and ſelect hours, & under ſuch poſitions of Planets, that ſuited with, or favoured, the nature and quality of the things compounded. And ſuch as diligently applied themſelves to know the relation and community between the ſuperiors & inferiors, never wanted a good medicine when they ſtood in need thereof. I wiſh that both our Phyſitians and Apothecaries would but ſeriouſly (without a prejudicate opinion) experiment ſome few things in this kinde: I am confident they would find a manifeſt difference in their operations, and the working of ſuch as are gathered or compounded, at uncertain, or contrary, times. But the truth is, the gathering of Simples according to particular conſtellations, and as they ought to be, is a doctrine neither judiciouſly ſtudied, or ſufficiently known. If Mr. *Culpeper* had but in a moderate meaſure underſtood this doctrin, or known but the tythe of what he has pretended unto, the world had not been abuſed with

with ſuch lame and imperfect directions, as he (in his *Engliſh Phyſitian* inlarged) has left unto it. And for ought I can gather either from his Books, or learn from the report of others, that underſtood him well, he was a man very ignorant, not onely in the forms of Simples, but in divers other things he boaſts of. Many Books indeed he ſeems to have tumbled over, and tranſcribed as much out of them, as he thought would ſerve his turn (though many times he were therein miſtaken) but added very little of his own, ſaving the ſcurrility wherewith he cloaked his ignorance, and which I am confident, can like no perſons, but ſuch as are willing to be cheated with words.

To ſuch therefore as cannot attain the exact knowledge of gathering Plants, by an Aſtrological election of fit and ſuitable times and houres, I ſhall only preſcribe ſome general rules. As 1. That the full Moon is a good time to gather thoſe herbs in, out of which the juyce is to be taken, for then are they moſt plentifully ſtored therewith; but for other

other uſes the leaves newly gathered (if it be not when they are very young or very old) are queſtionleſſe the beſt; but at ſuch times, and when they are not at all to be had, we muſt be glad to make uſe of the dryed ones, and let them be dryed in the ſhade, not in the ſun by any meanes, though Mr. *Culpeper* calls it the beſt way, and cites Dr. *Reaſon* for it, but to what purpoſe I know not; for ſuch as underſtand Nature, know that the Sun is too great a drawer out of thoſe ſpirits, which we muſt not loſe, if we expect benefit by the Plant. 2. Thoſe which you gather for your uſe in Winter, gather a little before they run to ſeed, for then they be moſt effectuall. 3. Let them be gathered (as neere as you can) from their proper places, which I have directed you to in the ſixt Chapter. 4. For the place you put them in, it matters not, ſo they loſe not their vertue by too much heat, or corrupt by too much moyſture. For Flowers let them be gathered in their prime, dryed and laid up as aforeſaid. 5. For Seeds let

let them be gather'd when they are full ripe, and kept not above a year, for afterwards they decay. 6. What Roots you have growing ſo neare you, that you can goe to them upon all occaſions, trouble not your ſelf to dry, but if you chance to bring any from a far, hang them ſomewhat near the fire, otherwiſe they will rot. 7. Barks newly gathered are beſt, or if the tree, whoſe bark you are to uſe, grow not neare you may take your own time, but they come off eaſieſt in the Spring. 8. For the bark of Roots ſlit them, and take out the pith, and that which remaines is called the bark. 9. If you have occaſion to preſerve the juyce of any Herb, pound the Herb and ſtraine it, then clarifie it by boyling it, till no ſcum riſe, and when it is cold, fill a glaſſe almoſt to the neck, and fill up the remaining ſpace with oyle, to keep out the aire, or elſe you may continue boyling it over the fire, till it attain unto the conſiſtence of Honey, and then it is by Phyſitians called the *Rob*.

CHAP.

CHAP. XXVI.

Of the Temperatures or Degrees of Plants.

AFter the gathering of Plants I hold it not amiſſe to acquaint you with the foure prime Qualities which are in them, *viz.* Heat, Cold, Moiſture and Dryneſſe, and that every one of theſe have four degrees or orders, which are by ſeverall perſons diverſly defined. But becauſe they are more eaſily apprehended by the effectuall operations which they have to alter a Mans body, we will goe that way to worke, for ſeeing that (in this ſence) that is temperate, which hath no power eminent to Heate, Cool, Dry or Moiſten the body of a Man, that is accounted the firſt Degree which obſcurely and but a little altereth it. The ſecond degree is when the body is manifeſtly altered, yet

without any hurt, offence, or trouble. The third degree is, when the Body is altered, not onely apparently, but also vehemently, not without trouble and offence, yet without Corruption. The fourth is, that which alters the Body most vehemently, and not without very grievous hurt. And every one of these have a tripple Latitude, intense, remisse, and indifferent.

Temperate Plants and Fruits are,

Maidenhaire, Asparagus, Licorish, Pine-Nuts, Figgs, Raisons, Dates, Woodroofe, Bugle, Goats rue, Flixweed, Cinkfoyl, &c.

Hot in the first degree are,

Wormwood, Marsh-Mallowes, Borage, Buglosse, Oxeye, Beets, Cabbage, Camomile, Agrimony, Fumitory, Wildflaxe, Melilote, Comfrey, Avens, Eyebright, Selfeheal, Chervill, Basil, &c. Sweet Almonds, Chestnuts, Cypresse Nuts, Green Wallnuts, Ripe Grapes, Ripe Mulberries, Seeds of *Coriander, Flax, Gromwell, &c.*

Hot

Hot in the ſecond degee are;

Brooklime, Green Anniſe, Angelica, Parſly, Mugwort, Betony, Groundpine, Fennigreeke, St. Johns Wort, Ivy, Hops, Bawme, Horehound, Roſemary, Savery, Sage, Maudlin, Ladies Mantle, Dill, Smallage, Marigolds, Carduus Benedictus, Scurvygraſſe, Aleboofe, Alexander, Archangell, Devillsbit, Sanicle, Capers, Nutmegs, Dry Figs, Dry Nuts; The Seeds of *Dill, Parſly, Rocket, Baſil, Nettle.* The roots of *Parſly, Fennell, Lovage, Mercury, Butterburre, Hogs Fennell,* &c.

Hot in the third degree are,

Aſarabacca, Agnus, Arum, Dry Anniſe, Germander, Baſtard, Saffron, Centaury Celandine, Calamint, Flebane, Elecampane, Hyſop, Bayes, Marjerom, Penny-Royall, Rue, Savine, Briony, Pilewort, Bankcreſſes, Clary, Lavender, Feverfew, Mint, VVatercreſſes, Hellebore, &c.

Hol

Hot in the fourth degree are,

Sciatica, Creſſe, Spurge, Pepper, Muſtardſeed, Garlick, Leeks, Onyons, Stonecrop, Dittander or *Pepperwort, Garden Creſſes, Crowfoot, Ros Solis,* and the root of *Pellitory* of *Spaine.*

Cold in the firſt degree are,

Orenge, Mallowes, Myrtle, Pellitory of the Wall, Sorrell, Woodſorrell, Burdock, Sheepherds Purſe, Hawkweed, Burnet, Coltsfoot, Quinces, Peares, Roſes, Violets.

Cold in the ſecond degeee are,

Blites, Lettice, Duckmeat, Endive, Hyacinth, Plantane, Fleawort, Nightſhade, Cucumbers, Chickweed, Dandelyon, Fumitory, Wildtanſy, Knotgraſſe, &c. *Orenges, Peaches, Dampſons,* &c.

Cold in the third degree are,

Purſlane, Houſeleek, Everlaſting, Orpine, &c. Seeds of *Henbane, Hemlock, Poppy.*

Cold

Cold in the fourth degree are,
Henbane, *Hemlock*, *Poppies*, *Mandrake*, &c.

Moist in the first degree are,
Bugloſſe, *Borage*, *Mallowes*, their flowers and roots, *Pellitory*, *Marigolds*, *Baſil*, the roots of *Satyrion*, &c.

Moist in the second are,
Violets, *Waterlilly*, *Orage*, *Blites*, *Lettuce*, *Ducksmeat*, *Purſlane*, *Peaches*, *Dampſons*, *Grapes*, *Chickweed*, &c.

Dry in the first degree are,
Agrimony, *Camomile*, *Eyebright*, *Selfeheale*, *Fennell*, *Myrtle*, *Melilote Cheſtnuts*, *Beans*, *Barly*, &c.

Dry in the second degree are,
Pimpernell, *Sheepherds Purſe*, *Wormwood*, *Vervaine*, *Mugwort*, *Betony*, *Horſetaile*, *Mint*, *Scavious*, *Bugle*, *Carduus Benedictus*.

Dry

Dry in the third degree are,

Southernwood, Ferne, Yarrow, Cinkfoyle, Angelica, Pilewort, Marjerom, Rue, Savory, Tanſy, Time, Hellebore.

Dry in the fourth degree.

Garden Creſſes, Wild Rue, Leeks, Onyons, Garlick, Crowfoot. But now methinkes I hear ſome of the Common people ſay, To what purpoſe doe you tell us of theſe Degrees? we are little wiſer then we were before as to the curing of a Diſeaſe. Obſerve therefore, that all Diſeaſes are cured by their Contraries, ſo that if the Diſeaſe you would cure be hot, as a *Feaver*, you muſt not uſe *Wormwood*, or *Mint*, or any thing that is hot, but that which is cooling, as *Sorrell*, *Endive*, *Violet* and *Strawberry* leaves, &c. In ſuch Diſeaſes as proceed of cold, hot things are to be uſed, as in cold Rhumes, *Anniſeed*, *Fennellſeed*, *Betony*, *Roſemary*, *Camomile Flowers*, &c. But for thoſe that are in health, and their bodies need no alteration, the moſt tem-

temperate are the beſt, as coming neereſt to a mans conſtitution, but in caſe you take any thing that exceedeth in heat or cold, correct it with its contrary, as Cucumbers are cold and moiſt, and therefore they are corrected with Pepper, which is hot and dry. In gathering Sallats, if you put *Tarragon* or *Garden Creſſes* amongſt *Lettice*, the heat of the one will qualifie the coldneſſe of the other, and ſo render them leſſe alterative to a Mans body.

CHAP.

CHAP. XXVII.

Of the Signatures of Plants.

THough Sin and Sathan have p'unged mankinde into an Ocean of Infirmities (for before the Fall, Man was nor ſubject to Diſeaſes) yet the mercy of God which is over all his Workes, maketh Graſſe to grow upon the Mountaines, and Herbes for the uſe of Men, and hath not onely ſtamped upon them (as upon every Man) a diſtinct forme, but alſo given them particular Signatures, whereby a Man may read, even in legible Characters, the uſe of them. That Plant that is called *Adders tongue*, becauſe the ſtalke of it repreſents one, is a ſoveraigne wound Herbe to cure the biting of an *Adder*, or any other venemous Creature. *Vipers Bugloſſe*, hath its ſtalkes all to be ſpeckled like a *Snake* or *Viper*, and is a moſt ſingular remedy againſt Poyſon, and the ſtinging of *Scorpions*, and other venemous Beaſts.

Beasts. If a Man doe but rub his hands with the Leaves or roots of *Dragons*, no *Serpent* will endure to come neer him, as *Diascorides* writeth. There be some Satyrions which are just like the Stones of a Man, one of them is full and plump, and sinkes if it be put in Water, and that provokes Lust, the other swims, and is lanke and shrivelled, and that mortifies it; so that there is a remedy for him in both cases. *Heart Trefoyle* is so called, not onely because the Leafe is Triangular like the Heart of a Man, but also because each Leafe containes the perfect Icon of an Heart, and that in its proper colour, *viz.* a flesh colour. It defendeth the Heart against the noisome vapour of the Spleen. Another *Trefoile* hath a white spot in the Leafe like a Pearle, and is of singular vertue, against the Pearl or Pin and VVeb in the eye. And there is another *Trefoyle* called *Purplewort*, which is an excellent remedy against the Purples. *Hounds tongue* hath a form not much different from its name, which will tye the

Tongues

Tongues of Hounds, ſo that they ſhall not barke at you: if it be laid under the bottomes of ones feet as *Miraldus* writeth. If the root of *Solomons Seale* be like a Seale (as ſome ſay it is) it is a good Signature, for it Seales up wounds after a wonderfull manner. There are ſome that ſay that the Leaves of *Elder* doe mollifye and diſcuſſe Schirrous tumors by Signature, becauſe it groweth in darke and ſhadowy places. But *Wallnuts* bear the whole Signature of the Head, the outwardmoſt green barke anſwerable to the thick skin wherewith the head is covered, and a Salt made of it, is ſingularly good for wounds in that part, as the kernell is good for the braines which it reſembles, being environed with a Shell, which imitates the Scull, and then it is wrapped up againe in a ſilken covering ſomewhat repreſenting the *Pia Mater*. The decoction of *Quinces* which are a downy and hairy fruit, is accounted good for the fetching againe haire that hath fallen by the French Pox. The

Lye

Lye wherein *Maidenhaire* is ſodden, or infuſed, is good to bathe the head, and make the haire come thicker in thoſe places which are more thin and bare. The Leaves of *Saint Johns Wort*, ſeem to be pricked or pinked very thick with little holes like the Pores of a Mans skin; It is a ſoveraigne remedy for any Cut in the skin, and as uſefull alſo for the opening of the Pores of the Body when they are obſtructed. The flower of *Aron* or *Cuckopint*, hath the evident reſemblance of the genitall parts upon it, and is a moſt powerfull incentive to Luſt. The poyſonous Gum Thiſtle called *Euphorbium*, doth bear evident Tokens of the hot and inflaming ſharpneſſe wherewith it is endued. And I know not why *Sagittaria*, or *Arrowhead*, ſhould not be good for wounds made with the head of an Arrow, and *Kidney beanes* for diſeaſes of the Kidneyes, though I confeſſe I have not read to that purpoſe in any Author. But *Pimpernell*, and generally all ſuch plants as are ſpeckled with

ſpots,

ſpots, like the skins of *Vipers* or other venemous Creatures, are known to be good againſt the Stings or Bitings of them, and are powerfull antidotes againſt poyſon.

CHAP. XXVIII.

Of Plants that have no Signatures.

BUt becauſe all Plants have not their Signatures, we are not raſhly to conclude that they are therefore unfit for Medicinall uſes, there being no neceſſity that all ſhould be thus ſigned, though ſome be, for then the rarity of it, which is the delight, would be taken away by too much harping upon one ſtring. Therefore being thus initiated, and entred into the uſefull knowledge of Plants by Signatures: We muſt caſt our ſelves with great Courage and Induſtry (as ſome before us have done) upon attempting the vertues of them, which are yet undiſcovered; for Man was not

not brought into the world, to live like an idle Loyterer or Truant, but to exerciſe his minde in thoſe things, which are therefore in ſome meaſure obſcure and intricate, yet not ſo much as otherwiſe they would have been, it being eaſier to adde then invent at firſt. And now I ſhall inſtance in a few things that are commonly accounted uſeleſſe and unprofitable, as in ſtinking Weeds and poyſonous Plants, how that they were not created in vaine, but have their uſes. They would not be without their uſe, if they were good for nothing elſe but to exerciſe the Induſtry of Man to weed them out, who had he nothing to ſtruggle with, the fire of his Spirit would be halfe extinguiſhed in the Fleſh. But further, why may not poyſonous plants draw to them all the maligne juice and nouriſhment, that the other may be more pure and refined, as well as Toads and other poyſonous Serpents lick the venome from the Earth, or that the Gall of Man ſhould draine his body of ſuper-

fluous

fluous Choler. Certaine it is, that many Herbes which the rude and ignorant call Weeds, are the ingredients of very ſoveraigne Medicines. *Winter-wolfsbane* which otherwiſe is ranke poyſon, is reported to prevaile mightily againſt the bitings of *Scorpions* and *Vipers*. So have I ſeen ſome people when they have burned their fingers, to goe and burne them again to fetch out the fire. And why may not one poyſon fetch out another, as well as fire fetch out fire? And that Night-ſhade which carries death in its very name, prevents death by procuring ſleep, if it be rightly applyed in a Feaver. It is ſuppoſed that *Hemlock* and *Henbane* may doe the ſame, in deſperate diſeaſes which require deſperate cures. *Hellebore* is a Simple which is dangerous to be given to delicate bodies without great Correction, yet it may be ſafely given to Countrey people, which have tough bodies, ſo that the conſtitution of the party receiving, as well as the quality of the thing to be received, is to be conſidered, for that

that which is one mans Meat, is another mans Poyſon; *Mallowes*, *Pellitory* and *Mercury* are reckoned Weeds by the Vulgar, and yet they are three of the five Emollient herbes, which are uſed in every Glister. Thus have thoſe Plants, which have no Signatures, very great uſe in Phyſick, and ſo have they, queſtionleſſe, which are not yet diſcovered, though they be left by providence for the enquiry of ſucceeding ages: For ſhould all things be known at once, Poſterity would have nothing left wherewith to gratifie themſelves in their owne diſcoveries, which is a great encouragement to active and quick VVits, to make them enquire into thoſe things which are hid from the eyes of thoſe which are ſo dull and ſtupid, that they reliſh all objects alike; though they have the uſe of Eyes as well as other folkes, yet they ſee not, or at leaſt take no notice of the outward formes of things, much leſſe the inward power, and ſecret vertue wherewith every Plant is indued.

CHAP.

CHAP. XXIX.

What Plants are profitable for every Part.

IT will not (as I ſuppoſe) be altogether unſeaſonable or impertinent before I conclude to ſet down ſomewhat more particularly what Plants do moſt properly belong to every part. For you muſt know that thoſe which are good for one part may be hurtfull to another, yet the ſame plant which in ſome diſeaſes is profitable, is in other ſome hurtfull, unleſſe it be prepared and corrected by a skilfull hand, there being in them beſides their firſt quality, ſome ſecond and ſecret ones which may very much annoy the body. And ſome plants though they are good for ſome parts, yet are altogether deſtructive to others, as I ſhall ſhew in the next Chapter. In this I ſhall ſpeak only of thoſe which maintaine the welfare of every part and cure, it being diſtempered. And becauſe the

head

head is the principall part of man, I ſhall begin with that and ſo deſcend downwards. And for as much as there ſeldome happens a ſingle diſtemper, but it hath ſome other concomitant, as Heat is wont to be joyned with Dryneſſe, and Cold with Moiſture, I ſhall therefore comprehend thoſe which heat and dry under one Title, and thoſe which coole and moiſten under another.

Thoſe which heat and dry the Head are,

Such as are well ſcented, yet not over-ſtrong, for ſtrong ſcents cauſe the Headache, by filling it with vapour: *Bettony*, *Marjorum*, *Sage*, *Hyſop*, *Bawme*, *Roſemary*, which ſtrengthens the Senſes and Memory, and is good for the *Palſey*. The Leaves and berries of *Bayes*, *Savory*, *Rue*, *Calamint*, *Lavender*, *Origany*, *Cowſlips*, *Lilly of the Vallies*, *Caſſidony*, which helpeth the Nerves, and therefore ought to be uſed in all remedies that belong to them, *Camomile*, *Baſil*, *Clove-Gilly-*

flowers, *Melilote*, *Piony*, the seeds of *Lovage* and *Fennell*, the root of the *Flower de Luce*, the flowers of the *Lime* tree, *Juniper berries*, *Coriander*, *Misseltoe*, which cureth the *Falling Sickneſſe*, &c. *Rubarbe*.

Thoſe which coole and moiſten the Head are,

Roſes which Strengthen the Braine; *Violets* which provoke ſleep, and allay the acrimony of Choler, Flowers of *Waterlilly*, the Leaves and Seeds of *Lettice*, *Purſlane*, *Poppy* ſeed, *Wood Sorrell*; To which may be added thoſe which are more moiſt, and fitter for Melancholy diſeaſes, *viz.* *Borrage*, *Bugloſſe*, ſweet ſmelling *Apples*, ſweet *Almonds*. All which may be applyed outwardly alſo to coole the Head, and beſides theſe *Nightſhade*, *Everlaſting*, *Violet* Leaves, the leaves of *Willowes*, but eſpecially of *Roſes*, and whatſoever is made of them. For they refreſh the Braine with their ſweet Odour, and drive away vapours from thence.

Thoſe

Thoſe which are good for the Eyes are,

Fennill, Eyebright, Rue, Verveine, Sellandine, Marjoram, Betony, Elecampane, the roots of *Valerian*, the ſeeds of *Clary*, but eſpecially of the wilde ſort, which is called *Oculus Chriſti*; one of which being put into each Eye cleanſeth them, and purgeth them exceedingly from wateriſh humours, redneſſe and inflammation, and divers other maladies, if not all that happen unto the Eyes, and taketh away the paine and ſmarting of. *Rubarbe.*

Thoſe which are good for the Eares are,

If the diſtemper proceed of Cold, *Rue, Bayes, Alecoſt, Gith*, bitter *Almonds, Onyons, white Hellebore* with *Honey, Hyſſop*, the juyce of *Savory* heated with a little Oyle of *Roſes*, and dropped into the Eares, eaſeth them of the noiſe, and ſinging in them, and of deafneſſe alſo, and ſo doth the juyce of ſweet *Marjoram*. If the diſtemper

proceed of Heat, *Roſes*, *Mallowes*, *Violets*, *Willow* Leaves, *Lettice*, *Water-Lillies*, the Oyle of *Apricocks* and *Peaches*, &c.

Thoſe which heat and dry the Breaſt and Lungs are,

Hyſſop, *Scabious*, which alſo openeth Impoſtumes in the Breaſt: *Maiden-hair*, *Coltsfoot*, which taken in a Pipe and ſwallowed downe, breaketh Impoſthumes: *Horehound*, *Calamint*, *Betony*, *Fluellin*, *Carduus Benedictus*, *Liquoris*, the roots of *Elecampane*, and *Flower de Luce*, round *Birthwort*, which prevaileth much againſt inward Impoſthumes, and thick Flegm, *Nettle-ſeeds*, *Fennellſeeds*, *Figs*, *Raiſons*, *Almonds*, the roots of *Arow*, *Dragons*, *Burnet*, *Liveſeed*, *Nettles*, *Rubarbe*.

Thoſe which cool and moiſten them are,

Violets, *Mallowes*, the ſeeds of white *Poppey* and *Fleabane*, broth made of *French Barly*, &c. which allay the hot and ſharp humours, moiſten the Lungs being

being dry, and make ſmooth the rough paſſages.

Thoſe which heat the Heart are,

Roſemary, Bawme, Baſil, Carduus Benedictus, Water Germander, Flixellin, the Barkes and Seeds of *Citrons, Clove Gillyflowers, Angelica* roots, and thoſe of *Elecampane, Marigold flowers; Mace, Nutmegs, Cinamon, Cloves, Saffron, Southernwood, Goats rue, Woodroffe.*

Thoſe which cool the Heart and reſiſt dryneſſe are,

Roſes, Violets, Sorrell, Bugloſſe, Water Lillie, Plantane, the juice of *Lemons, Oranges,* and *Pomgranates, Cherries,* ſweet ſmelling *Apples, Raſpberries, Strawberry* Leaves.

Thoſe which heat and dry the Stomach are,

Mint, Wormwood, Fennell, Roſemary, Sage, the leaves of *Bayes,* the Berries of *Bayes* and *Juniper,* the Seeds of *Carowaies, Anniſe, Cummin, Smalage,*

Avens, Bawm, Parſly, Time, &c. *Rubarbe.*

Thoſe which cool the Stomach are,

Sorrell, Sheepſorrell, Purſlane, Lettice, Plantane, Endive, Sowthiſtles, Chicory, Roſes, Violets, Peaches, Quinces, Melons, Cucumbers, Peares, Garden Corinths, Barberries, the juice of *Lemmons, Medlars, Strawberries, Mulberries*, &c,

Thoſe which heat the Liver are,

Agrimony, Wormwood, Maidenhaire, Sage, Dodder, Aſarabacca, Liverwort, Spike, Maudlin, Fennell, Alexanders, Parſly, Aſparagus, Bitter Almonds, Elicampane, the Seeds of *Anniſe, Carowayes, Cummin, Fennell, Parſly*, &c.

Thoſe which cool the Liver are,

Endive, Succory, Clary, Dandelyon, Purſlane, Lettice, Roſes, Violets, Water-Lillies, Sorrell, Strawberries, the ſeeds of *Melons, Gourds, Cucumbers, Citrulls, Endive, Lettice, Clary, Parſly, French Barly*, &c.

Thoſe

Thoſe which heat the Spleen are,

Spleenwort, or *Miltwaſte*, *Wormwood*, *Dodder*, *Fumitory*, *Hops*, *Rue*, *Calamint*, *Alexanders*, *Fluellin*, *Germander*, *Groundpine*, *Bawme*, *Creſſes*, *Scurvygraſſe*, *Horehound*, *Broom*, *Elder*, *Aſarabacca*, the roots of *Polypode*, *Elecampane*, *Felwort*, *Ferne*, *Fennell*, *Parſly*, *Agnus*, *Tamarisk*, *Capers*, *Birthwort*, *Madder*, *Bitter Almonds*, &c.

Thoſe which cool the Spleen are,

Succory, *Endive*, *Purſlane*, *Lettice*, *Willowleaves*, *Sorrell*, *Dandilyon*, *Barberies*, *Strawberries*, *Cherries*, &c.

Thoſe which warme the Reines and Bladder are,

Maidenhaire, *Rue*, *Saxifrage*, *Betony*, *Privet*, *Fennell*, *Rocket*, *Mugwort*, *Horſeraddiſh*, *Calamint*, *Sea Holly*, *Aſparagus*, *Butchers Broom*, *Burnet*, *Liceriſh*, *Alexanders*, *Parſly*, *Nettles*, *Wild Carrets*, *Dropwort*, *Madder*, *Juniper Berries*, *Camomile flowers*, *Chervile*, *Almonds*, the kernels of *Peaches*, *Cherries*, &c.

Thoſe which cool the Reins and Bladder are,

Knotgraſſe, Mallowes, Yarrow, Moneywort, Plantane, Endive, Succory, Lettice, Purſlane, Water Lillies, Houſeleek, Pellitory, the Seeds of *Poppy, Flebane, Pompions*, &c.

Thoſe which heat the Womb are,

Mugwort, Motherwort, Bettony, Dittany, Origany, Pennyroyall, Calamint, Marjoram, Sage, Time, Bawm, Savory, Rue, Roſemary, Bay leaves, Camomile Flowers, the Seeds of *Cummin, Anniſe, Fennell, Wildcarret, Parſly, Alexanders*, the roots of *Birthwort, Madder, Sea Holly, Fennell, Alexanders, Sparagus, Burnet, Angelica, Valerian, Maſterwort*, &c.

Thoſe which cool the Womb are,

Water Lillies, Violets, Roſes, Quinces, and their Syrup, *Purſlane, Lettice, Clary, Wildtanſy, Orach, Burdocks, Willoweed, Mirtle leaves, Moneywort, Sowthiſtles, Endive, Succory*, &c.

Thoſe

Thoſe that heat the Joynts are,
Cowſlips, Sciatica Creſſes, Marjoram, Betony, Hot-Arſmart, Sage, Agrimony, Camomile, Saint Johns Wort, Melilote, Mugwort, Roſemary, Bay-leaves, Lavender, &c.

Thoſe that cool the joynts are,
Plantane, Willow-leaves, Vine leaves, Lettice, Henbane, Nightſhade, Houſeleek, Water Betony, the inner barke of Elme, &c.

CHAP. XXX.

What Plants are destructive to every part.

AS there be Plants profitable for every part, so there be some, though not so many, which are somewhat destructive to some particular parts, if not corrected with the mixture of some other Ingredients. For though an Herbe be good for the Stomack, it may be naught for the Head, and that which is good for the Head, may be naught for the Stomach. And therefore I thinke it will be worth while to set them down too, according to my promise made in the foregoing Chapter.

Those that are offensive to the Head are,

The Seeds of *Agnus*, *Ivy* taken inwardly, *Camells Hay*, the seed of *Meddow sweet*, *Hempseed*, *Rocket*, *Horse-*

reddish

reddish, Garlick, Onyons, Leeks, Cedar berries, Bitter Vetch, the juice of *Wormwood, Acornes, black Olives,* the fruit of the *Strawberry tree, Frankincense* taken immoderately, the fruit of the *Mastick tree, Saffron, Hogs Fennell, Sowbread, Mandrake, Hemlock,* &c.

Those which are offensive to the Eyes are,

Dill, Lentills, Hemp, Lettice, Beanes, Raddish, Cabbage, Mustard seed, Onyons, Leeks, Garlick, &c.

Those which are offensive to the Heart are,

Spurge, Broom,

Those which are offensive to the Stomach are,

Hyssop, Soldanella, Flower de Luce, Alder, Spurge, Broom, Ferne, Mushromes, Beets, Distaffe Thistle.

Those which are offensive to the Liver are,

Spurge, Mezereon.

Those

Thoſe which are offenſive to Conception are,

Spleenwort, Colloquintida, Wild Cucumbers, Scammony, Savine, Hempſeed, the ſeeds of *Agnus.*

CHAP. XXXI.

Of ſuch Plants as have operation upon the bodies of Bruit Beaſts.

THough the Bodies of Men be more tender then any other Creatures, fuller of Diſeaſes, and eaſier to be wrought upon, and ſo the greateſt number of Plants is applicable to them, yet Bruit Beaſts alſo have ſome ſhare in the Phyſicall uſe of Plants as well as they. For a *Toad* being over-charged with the poyſon of the *Spider*, as is ordinarily believed, hath recourſe to the *Plantane* leaſe which cures him. The *Weaſell* when ſhe is to encounter the *Serpent*, armes her

her ſelfe with eating of *Rue*. The *Dogge* when he is ſick at the Stomach, knowes the Graſſe that will cure him, eates of it, falls to his Vomit and is well. When the *Cat* is ſick, ſhe goes to the *Nep* or *Catmint*, of which there is this old Rime;

If you ſet it, the Catts will eate it,
If you ſow it, the Catts can't know it.

If the *Aſſe* be oppreſſed with melancholy, he eates of the Herbe *Aſplenium*, or *Milwaſte*, and ſo eaſes himſelfe of the ſwelling of the Spleen: (*Vitruvius* ſaith, that the Swine in *Candy*, by feeding thereon, were found to be without Spleens.) So the wilde *Goats* being ſhot with Darts, or Arrowes, cure themſelves with *Dittany*, which Herbe hath the power to work them out of the Body, and to heale up the wound. The *Swallow* makes uſe of *Celandine*, which is therefore called *Chelidonium*, the *Linnet* and *Goldfinch* of *Eyebright*, for the repairing of their owne, and their young

ones

ones sight. And here, though I am no Leech, yet I shall set down such Plants as I have seen and read, are used by *Leeches*, and the manner of applying them to Cattle, and such unusuall Accidents as happened to them by their operation. The Leaves of black *Briony* bruised with Wine and laid upon the sore necks of *Oxen* that are galled with the yoake, helpeth them. When a *Cow* hath newly Calved, they give her unthreshed *Rye* out of the Barne to make her clean, as they call it. If the *Calfe* be dead in the *Cows* Belly, they give her *Savine* to make her cast it. When a *Cow* is troubled with the *Tayle Evill*, they make an Incision towards the lower end of the Tayle where the Evill is, and put therein *Rue*, *Pepper* and *Salt*, which will cure them. And if *Hoggs* or other Cattle be subject to the *Murraine*, it is usuall with them, and almost with every Husbandman, to cut an hole in the ear or *Dewlap*, and put therein a piece of the root of *Bears foot*, which some call *Pegging*, some

Set-

Settering, and therefore the Plant is by ſome called *Setterwort*. *Hay* ſodden in Water till it be tender, and applyed hot to the Chaps of Beaſts which are Chap-fallen, through too much abſtinence, either by long ſtanding in the Pound or Stable without meat, is a preſent remedy. *Ground Ivy* ſtamped and mixed with a little *Ale* and *Honey*, and ſtrained, taketh away the Pin and Web, or any griefe out of the eyes of Horſes or Cowes, or other Beaſt, being ſquirted into the ſame with a Syringe. It is reported that if one caſt *Lyſimachia*, or *Looſeſtrife* between two Oxen when they are fighting, they will part preſently, and being tyed about their necks it will keep them from fighting. Cocks having eaten *Garlick*, are moſt ſtout to fight, and ſo are Horſes. A *Serpent* doth ſo hate the *Aſh tree*, that ſhe will not come nigh the ſhaddow of it, but ſhe delights in *Fennell* very much, which ſhe eates to cleer her eyeſight. If you are troubled with *Moles* in your Gardens or other Grounds, put *Garlick*, *Leeks*

or

or *Onyons* in their paſſages, and they will leap out of the ground preſently. *Adders tongue* wrapped in *Virgins waxe*, and put into the left eare of any Horſe, will make him fall downe as if he were dead, and when it is taken out againe, he becomes more lively then he was before. If Aſſes chance to feed much upon *Hemlock*, they will fall ſo faſt aſleep, that they will ſeeme to be dead, in ſo much that ſome thinking them to be dead indeed, have flayed off their skins, yet after the *Hemlock* had done operating, they have ſtirred and wakened out of their ſleep, to the griefe and amazement of the owners, and to the laughter of others. If a Horſe cannot piſſe without paine, take an *Elder* bough full of Leaves, and ſtrike him gently therewith, and cover his Head, Neck and Body with the ſame Leaves, and it will help him much. *Wood Nightſhade*, or *Bitterſweet*, being hung about the neck of Cattell that have the Staggers helpeth them. The roots of *Gentian*, or the juice of them, or the de-

coction

coction of the Herbe or Root, being given to Cattle to drinke, freeth them from the *Botts* and *Wormes*, and many other Diſeaſes, as alſo when they begin to ſwell being poyſoned by any venemous Worme or Tick, which they often lick up with the Graſſe; as alſo when ſuch wormes, or other hurtfull vermine, have bitten Kine by the Udders, or other tender places, which preſently thereupon ſwell and put them to ſo great paine, that it makes them forſake their meat, doe but take the Leaves of *Gentian* and ſtroke the bitten place with the juice of them, and they by two or three times are helped and cured. He that deſires further Information in cures of this nature, let him read the workes of *Gervaſe Markham*, who hath done very well upon this ſubject.

CHAP.

CHAP. XXXII.

Of the Speculative and pleaſant uſe of a Garden.

TO leave off the properties of Simples, we come now to the conveniences of a Garden, which are manifold in reſpect of Speculation, by which I mean meer walking, or at moſt, but gathering ſuch things as pleaſe them, which I count no labour, for that I intend to oppoſe as the practicall uſe. That there is no place more pleaſant, may appear from God himſelfe, who after he had made Man, planted the Garden of *Eden*, and put him therein, that he might contemplate the many wonderful Ornaments wherewith Omnipotency had bedecked his Mother Earth. It was not ſo much for *Adams* recreation, who at that time was not acquainted with wearineſſe, as it was for his Inſtruction, but to us it will ſerve for both. There

is

is not a Plant which growes but carries along with it the legible Characters of a Deity, according to the verse;

Præsentemque refert quælibet herba Deum.

As for recreation, if a man be wearied with over-much study (for study is a wearinesse to the Flesh as *Solomon* by experience can tell you) there is no better place in the world to recreate himselfe then a Garden, there being no sence but may be delighted therein. If his sight be obfuscated and dull, as it may easily be, with continuall poring, there is no better way to relieve it, then to view the pleasant greennesse of Herbes, which is the way that Painters use, when they have almost spent their sight by their most earnest contemplation of brighter objects: neither doe they onely feed the Eyes, but comfort the wearied Braine with fragrant smells, which yeild a certaine kinde of nourishment, as will appear by the following stories. My

Lord

Lord *Bacon* in his Naturall Hiſtory reporteth, that he knew a Gentleman that would faſt ſometimes foure or five dayes without any manner of ſuſtenance: In which time he would have lying by him a wiſp of Herbes, to which he would ſmell now and then, having in it, *Garlick*, *Onyons* and other Eſculents of ſtrong ſcent. Doctor *Hackwill* in his Apology for the worlds not decaying, tells a ſtory of a *German* Gentlewoman, who lived fourteen yeares without receiving any nouriſhment downe her throat, but onely walked frequently in a ſpacious Garden full of Odoriferous Herbes and Flowers. And that this is poſſible is further apparent by the ſtory of *Democritus*, who when he lay a dying, heard his Nurſekeeper complaine, that ſhe ſhould be kept from being at a Feaſt and Solemnity (which ſhe much deſired to ſee) becauſe there would be a Corps in the houſe; whereupon he cauſed Loaves of new bread to be ſent for, and opened them, and ſo kept himſelfe alive with the odour of them

them till the Feaſt was paſt. The Eares alſo (which are called the Daughters of Muſick, becauſe they delight therein) have their recreation by the pleaſant noiſe of the warbling notes, which the chaunting birds accent forth from amongſt the murmuring Leaves. As for the Taſte, they ſerve it ſo exceedingly, that whether it be affected with ſweet, ſower or bitter things, they even proſtitute themſelves. And for the feeling likewiſe, they entertaine it with as great variety as can be imagined, there being ſome Plants as ſoft as ſilke, and ſome as prickly as an *Hedgehogge*; ſo that there is no outward ſenſe which can want ſatisfaction in this *Cornucopia*. And if the outward ſenſes be ſo delighted, the inward will be ſo too, it being as it were, the School of Memory and Fancy. Hereupon it was that the antient Poets did ſo much extoll the Gardens of *Alcinous* and the *Heſperides*. The grove of *Mars* was not unknowne to *Juvenal*, neither were there any Poets which had not receſſes into thoſe ſa-

sacred places. The first instituter of them at *Athens* was, *Epicurus*, in which he had a School where he taught, one that knew as much what belonged to pleasure as any Man: *Seneca* the Philosopher was likewise a great admirer of them, and is said to have expended vast summes of Money this way. A house though otherwise beautifull, yet if it hath no Garden belonging to it, is more like a Prison then a House.

CHAP.

CHAP. XXXIII.

Of the Practicall and profitable use of a Garden.

THe pleasure of a Garden being thus demonstrated, I shall conclude all with the profit thereof, which is likewise manifold. First, for household occasions, for there is not a day passeth over our heads, but we have need of one thing or other that groweth within their circumference. We cannot make so much as a little good Pottage without Herbes, which give an admirable relish, and make them wholsome for our Bodies. In a Garden there be *Turneps* and *Carrets* which serve for sauce, and if meat be wanting, for that too. Neither doth it afford us Alimens only, but Physick, (no Herbes being without their Physicall use, as I have said before, especially if it be well furnished with Simples.) But besides this inestimable profit,

fit, there is another not much inferior to it, and that is the wholſome exerciſe a man may uſe in it. Dr. *Pinck* late Warden of *New Colledge* in *Oxon.* whereof I was once a Member (whoſe memory I very much honour) was a very learned Man, and well verſed in Phyſick, and truly he would riſe very betimes in the morning, even in his later dayes, when he was almoſt fourſcore yeares old, and going into his Garden he would take a Mattock or Spade, digging there an houre or two, which he found very advantagious to his health. A Man worthy to be imitated, not only in this, but alſo in many other things, eſpecially in his charitable Proviſions for bringing up of poore Children. And if Gentlemen which have little elſe to doe, would be ruled by me, I would adviſe them to ſpend their ſpare time in their Gardens; either in digging, ſetting, weeding, or the like, then which there is no better way in the world to preſerve health. If a man want an Appetite to his Victu-

alls,

alls, the ſmell of the Earth new turned up, by digging with a Spade will procure it, and if he be inclined to a Conſumption it will recover him. Gentlewomen, if the ground be not too wet, may doe themſelves much good by kneeling upon a Cuſhion and weeding. And thus both ſexes might divert themſelves from Idleneſſe, and evill Company, which oftentimes prove the ruine of many ingenious people. But perhaps they may thinke it a diſparagement to the condition they are in; truly none at all, if it were but put in practice: For we ſee that thoſe faſhions which ſometimes ſeem ridiculous, if once taken up by the Gentry, ceaſe to be ſo. And if you ſhall require another Precedent beſides that before mentioned, I ſhall preſent unto you that of the wiſe and mighty Emperour *Diocleſian*, who after he had raigned eighteen yeares, left for a ſeaſon the whole Government of the Empire, and forſaking the Court, betook himſelfe to a meane Houſe, with a Garden adjoyning, wherein with his

owne hands, he both ſowed, ſet, and weeded the Herbes of his Garden; which kinds of life ſo pleaſed him, that he was hardly intreated to reſume the Government of the Empire. By this time I hope you will thinke it no diſhonour to follow the ſteps of our Grandfire *Adam*, who is commonly pictured with a Spade in his hand, to march through the Quarters of your Garden with the like Inſtrument, and there to rectifie all the diſorders thereof, to procure, as much as in you lyes, the recovery of the languiſhing Art of Simpling, which did it but appeare in lively colours, I am almoſt perſwaded, it would ſo affect you, that you would be much taken with it. There is no better way to underſtand the benefit of it, then by being acquainted with Herballs, and Herbariſts, and by putting this Gentile and ingenious Exerciſe in practice, that ſo this part of Knowledge, as well as others, may receive that eſteem and advancement that is due to it, to the baniſhment of Barbariſme and Ignorance,

rance, which begin againe to prevaile againſt it. So that this Art, with the reſt, being improved, may bring forth much Glory to God, much Honour to the Nation, much Pleaſure and Profit to thoſe that delight in it, and much Comfort to thoſe which have need of Phyſick. To which end, the Right Honourable Earle of *Danby*, erected the Phyſick Garden in *Oxford*, a place worth the ſeeing. And thus you have the unpoliſhed ſtructure of Simpling:

Omne tulit punctum qui miſcuit utile dulci.

FINIS.

Perſpicillum

Microcoſmologicum:

OR,

A PROSPECTIVE

FOR

The diſcovery of the Leſser World.

Wherein Man is in a Compendium; Theologically, Philoſophically, and Anatomically deſcribed, and compared with the Univerſe.

To the end, that Men may underſtand, that Selfe-knowledge is delightfull, and neceſſary to be enquired after.

Collected out of ſeverall Authors.

Gen. 3. ver. 19.
Duſt thou art, and to Duſt thou ſhalt returne.
Perſius.
Nemo in ſeſe tentat deſcendere Nemo.

LONDON,
Printed by *J. G.* for *Nath: Brook* at the Angell in Cornhill, 1656.

TO THE READER.

Gentle Reader,

HAving already presented thee with one of the Handmaids of Physick, which is Botany, *I conceive it not altogether impertinent to propose another, and that is* Anatomy, *out of which two are held forth very divine Considera-*

tions. It had been proper to have ſet this formoſt, being the firſt borne, yet for ſome reaſons beſt knowne unto my ſelfe, I have given the other the precedency. Out of that thou maiſt pleaſe the Eyes of thy Body and Minde, out of this thou maiſt delight the Eyes of thy Minde and Body, that being more Practicall, *this more* Speculative, *yet no leſſe uſefull, becauſe it ſo much concernes the knowledge of ones ſelfe, wherewith every one ought to begin. For indeed that Divine Sentence,* Γνῶθι σεαυτὸν *ought to be the ſtudy of a mans whole life. Hence thou maiſt learne to know thy ſelfe, and by knowing thy ſelfe, thou maiſt know God the better, he being to be known as by the book of Scripture, ſo by the book of the Creatures alſo.* The Heavens declare the Glory of God,

God, and the Firmament ſheweth his handy-worke; *And if the Heavens which are inanimate, doe thus demonſtrate it, how much more will the ſtructure of Man doe it, who is the nobleſt of Corporeall living Creatures? Let us therfore ſeriouſly deſcend into our ſelvs, there being no better way for the underſtanding of thoſe things which tend moſt to the glory of God. Self-knowledge is a Jewell of ſuch admirable vertue, that both the Indies cannot equall it. It brings a Man to have low and humble thoughts of himſelfe, to the great honour of his Maker. It cauſes him to be Maſter of his Affections, which is more then ever* Alexander *was, though it be ſaid that he conquered the World. Therefore he was judged by the Oracle of* Apollo, *to be the wiſeſt Man which knew*

himſelfe beſt. For thoſe which are ignorant of their owne crooked Nature and Compoſition, are ſo prone to ſwell with Pride, and fall into other vices, that they exalt themſelves above all that is called God. But he which hath a true knowledge of himſelfe, underſtands of what contemptible matter he is made, and from thence takes an occaſion to humble himſelfe. And conſidering of what a coorſe Element he is created, he will admire the curious workmanſhip of that incomparable Architect, *who out of red Earth, not the more ſolid part of it, but the britleſt duſt, did compoſe a Creature of thoſe exquiſite Dimenſions, for matter of Body, of thoſe ſupernaturall Endowments of Soule. Wherefore it ought to be the firſt fruits of every Mans ſtudy to know himſelfe, which that he may the better*

better doe, I have laid this Groundworke, on which any man of an indifferent capacity may build somewhat of his owne. If what I have written be approved, I shall be glad, if misliked, I shall onely say;

Hæc bona si non sint, Tu meliora doce.

If thou mislike what I have done,
Doe thou teach better of thine own.

Per-

Perſpicillum
Microcoſmologicum:

OR,

A Proſpective Glaſs, through which the Little World may be diſcovered.

ALthough the minde of Man be naturally addicted to Knowledge and Learning, yet Satan that arch Politician, and grand Enemy of Mankinde, doth by his ſubtill impoſtures, ſo blinde the underſtanding, that it chooſes rather to wear out it ſelfe in ſtudying the knowledge of the *Celeſtriall* and *Terreſtriall* Globes, then ever to remember the moſt neceſſary Study of all, the Study of it ſelfe. But he that will approve himſelfe a good Scholar indeed, muſt know himſelfe, and rightly under-

understand all things at home, before he rove abroad to the forraigne Study of other matters. And if Men were as prone to let their Knowledge begin at home, as their Charity, certainly every one would be better able to know all things besides, seeing that he hath the likenesse of all things in him. First, he shall know God, because he is formed after his Image; whence he is called by Divines, the *Royall Temple*, and *Image of God*. And as *Cæsars* Image may be seen on his Coyn, so may the Image of God in Man. He shall also know the Angells, because he understands with them; and Beasts, because he hath such a sensitive faculty as they have, he groweth with Plants. Lastly, he is the Measure and Rule of all Bodies, therefore Man was called by the Ancients, the bound and Horizon of Corporeal and Incorporeal substances, the Abstract, Modell, and briefe story of the Universe, the *Utriusque Naturæ vinculum*, the Cabinet and Storchouse of three living Natures; Sensuall,

Sensuall, Intellectuall, and Rationall, the Analysis or Resolution of the greater World into the lesse; the Epitome and compendium of that huge Tome, that great Manuscript and worke of Nature, wherein are written the Characters of Gods omnipotency and power, framing it, and disposing it, to the use and benefit of Man; other Creatures paying him an awfull Obedience, as a Tribute and Homage due to their Commander in all things, so neer of kin to the Deity, that *Melanchon* makes him a terrestriall tra sitory God: having little to divide him from a *Numen*, but that one part of him was Mortall, and that not created so, but occasioned, miserably occasioned by disobedience.

But of all the things that Man hath been compared to, he is assimilated to none more fitly, then to the Universe; of which he is so exact a modell, that by the Learned he is called Μικρόκοσμος, a *Microcosme* or little World. Some may thinke Man to be called so by some Rhetoricall Trope, but

but whosoever shall seriously compare them together, their neerer judgment and second thoughts will tell them, that there is a reall truth therein. For first we are a rude Masse, and only in the rank of Creatures, which only are, and have a dull kind of being, not yet priviledged with Life, or preferred to Sense or Reason; then we live the Life of Plants, then the Life of Beasts, then the Life of Men, and at last the Life of Spirits.

The whole Creation is a mystery, especially that of Man; At the Blast of Gods mouth were other Creatures made, and at his bare word they started out of nothing; but in the Frame of Man (as the Text describes it) he played the Sensible Operator, and seemed not so much to create, as make him. The privy Counsell of Sonne and Holy Ghost, is required to the moulding and polishing of the glorious piece. Angels may look on and wonder, touch or assist they may not, no not so much as to temper, or prepare the Mettall. Here is a worke only for

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a Trinity: A taske for *Jehovah* himſelfe, for *Jehovah Elohim*, the Father by the Sonne, in the power of the Spirit. No doubt, ſomewhat of wonder was a projecting, when a compleat Deity was ſtudying its perfection; ſomewhat that ſhould border of everlaſtingneſſe, when the Finger of God was ſo choicely induſtrious. And, *Loe, what is produced?* Man the Maſterpiece of his deſigne, and Workmanſhip, the great Miracle and Monument of Nature, not only for externall tranſcendencies, but the Glory and Pomp of inward Faculties, ſtampt and engraven to the Image of his Maker, who, when he had ſeparated the Materialls of other Creatures, there conſequently reſulted a Forme and Soule; But having reviſed the Walls of Man, he was driven to a ſecond and harder Creation of a Subſtance like himſelfe, an incorruptible and immortall Soule. Of whoſe faculties and paſſions I ſhall be conſtrained to touch, rather then handle, leſt that my intended Epitome ſhould ſwell into a huge Volume.

The

The Soule (in generall) is (defined by Philosophers to be) the perfection of a Naturall Organicall body, having Life in it potentially. It is by them also divided into three degrees or kindes, *viz.*

1. *Vegetative.*
2. *Sensitive.*
3. *Rationall.*

All these are in a Man, not that more Soules can be comprehended in one Body, but the Vegetative is comprehended in the Sensitive, and the Sensitive in the Rationall, as a Triangle is contained in a Quadrangle.

The Vegetative Soule is the first Act of an Organnick Naturall Body, by which it lives and receives Nutriment, is increased, and begets somewhat like it selfe.

The Sensitive Soul is an Act, whereby a Living Creature doth feel, desire, and move.

The rationall Soule is an incorporeall and Spirituall substance, which being joyned to the Body of Man, informes it with Understanding and Will,

Will, and yet it can underſtand, after it is diſunited from the Body.

And the faculties of theſe degrees are likewiſe divided: The faculties of the Vegetative Soul are three,

1. *The Nouriſhing.*
2. *The Increaſing.*
3. *The Procreating.*

The Nouriſhing Faculty is a Power of the Vegetable Soule, which by vertue of the Native heat, doth convert the Nutriment into the Subſtance of the animate Body, that that which is ſpent may be renewed, and the Operation of it is Nutrition.

The Increaſing Faculty is a Power of the Vegetable Soule, whereby an animate Body being nouriſhed by aſſimulated Aliment, is extended into all Dimenſions, untill it obtaine a juſt bigneſſe, to ſet forth its proper and convenient Actions. The Object of this, as alſo of the precedent Faculty, is Nutriment.

The third Faculty is called the Procreating, which is a power of the Soule, making out of the politique ſeed, a new

new Substance like to that which is nourished, for the perpetuall conservation of the species.

Within the Sensitive Soule are comprehanded the Senses, which are either *Externall*, or *Internall*.

The Externall Senses are five:

1. *Seeing.*
2. *Hearing.*
3. *Smelling.*
4. *Tasting.*
5. *Touching.*

All of which have their proper Objects, Organs and Mediums.

Seeing of all the Externall Senses, is accounted the most excellent; It makes every visible thing actually so. Its Objects are either Colours, or light and shining Bodies, or those Ἀνώμυμα, which are seen onely in the Night, as Rotten Wood, Bones of some Fishes, &c. The Organ of this sense is the Eye, of whose admirable structure, together with the Eare, and the Tongue, I shall say somewhat when I come

come to the Anomaticall part. Its Medium is called by *Ariſtotle*, Διάφανες, that is, any thing that is perſpicuous, as Water, Glaſſe, &c. but eſpecially the Aire, without which it were impoſſible to ſee any thing.

Hearing is the next which receives every audible object, which the Greeks cali Ἀκουστὸν, and it is Sound. The Inſtruments, or Organs of this Senſe, are either Externall or Internall. The Externall are the two Eares, ſo artificially contrived by Nature, that they can both receive, & contain the Sound. The Internall are Nerves, ordained to that purpoſe. The Mediums of this Senſe likewiſe are Internall, and Externall. The Internall is the Native Aire, which is contained within the Eare. The Externall is the Aire and Water. For living Creatures do heare in the Water, as well as in the Aire, though not ſo frequently.

Smelling challengeth the next place, though in the quickneſſe of this Senſe, Doggs, Vultures, and other Creatures excell Men, yet Men can more per-

perfectly discerne the differences of objects, wherein the chiefest perfection of a Sense consists. Its Object, which *Aristotle* calls Ὀσφραϛὸν, must be some mixt Body; for simple Bodies, as the Elements, are without Sent, yet not every mixt Body, but onely such a one as hath also taste in it. Its Organ is the Nose. The Aire and Water serve for *Mediums* to this Sense.

Tasting is an Externall Sense, which hath for its object τὸ γευϛὸν, that is, any thing that is tasteable. Its Instrument is the Tongue, in which there is a Nerve, which comes to the Tip of it, which serves for tasting. It hath no exrernall Medium. The Internall is the Musculous and spongy part of the Tongue, which being full of moisture, derives the Taste of things to the aforesaid Nerve. Whence a dry Tongue tasts not at all, nor that which hath too much moisture in it.

Touching of all the Senses is the ignobleſt, and belongs to Man, not as

as he is a Man, but an Animal: Its Object is any thing that can be handled, and is called by *Ariſtotle*, τὸ ἁπτὸν. The Organs of it are the Nervs, diſperſed throughout the whole Body. It hath no Externall Medium; the Internall Medium is the Fleſh. Thus much of the outward Senſes.

The Internall Senſes are three, *viz.*

1. *The Common Senſe.*
2. *The Phantaſie.*
3. *The Memory.*

In which the Situations and Objects are remarkable.

The Situation of the Common Senſe is in the former part of the Braine. Its Objects are all the Species, which come immediately from the outward Senſes. *Ariſtotle* compares it to a Center, in which all the outward Senſes doe meet, as Lines in a Circle.

The *Phantaſie* is placed in the middle part of the Braine, between the

the *Common Sense* and the *Memory*. The Objects of this Sense are the Species communicated to it from the *Common Sense*, as also the Images of things, which of its owne Power, it doth from some inward cause conceive to it selfe.

The *Memory* is situated in the hinder Brain, whose Objects are the Species of things past, which being received by the other Senses, are there laid up, as in a Treasure-house. The Organs of these Internall Senses, are the three Ventricles of the Braine, in which they are situated.

Within the Sensitive Soule is comprehended also, the Motive, Faculty, which is either Appetitive, or locomotive. The Appetitive Faculty, is either Concupiscible, or Irascible; out of both which arise the Affections, which are some Good, some Evill, and some Indifferent. The Good are Love towards God, our Countrey, Neighbours, Parents, *&c.* also the Fear of God, Love to ones Neighbour, Hatred of Vices. The Evill are

are Envy, Ill-will, Unmercifulneſſe, Hatred of Good Men. The Indifferent are, Pleaſure, Grief, Love, Joy Fear, Anger, *&c.*

Of the way whereby Locall Motion is made, this Climax is diligently to be obſerved. The Object being received by the inner Senſes, from the outward, they judge of it, whether it be convenient or no. From the inward Senſes it is known, being known, it is deſired. That deſire moves the Brain, the Brain moves the Nerves, and poures Animal Spirits into them. The Nerves goe into the Muſcles, and being ſtirred by the Spirits, move the Muſcles: then the Muſcle doth extend and contract it ſelfe. The Fleſh of the Muſcles being dilated is made ſhorter, and ſo draws the ſtring or Tendon: the ſame Fleſh being contracted, cloſeth a little, and then becomes longer, and ſo looſens the Tendon. The Tendons being thus drawn together, doe draw the Joynts, but being looſed, they grow looſe, whence the Externall Members, are

either bended or extended, and ſo they are moved from a place, to a place.

Within the Rationall Soul, which no Creature enjoyes but Man, are comprehended the Underſtanding, and the Will, which two cannot be diſtinguiſhed from the Soule, onely they are divers Operations of the ſame Soule: For the Underſtanding doth apprehend and know the Species of things, without any circumſtances and accidents belonging to them. Neither doth it onely know them, but alſo judge of them & having judged of them, preſents them to the Will, which is a Faculty of the Soul when it underſtands, whereby a Man doth either chuſe or refuſe thoſe things, which have been apprehended, and judged by the Underſtanding. The Object of the Will is, either true or apparent good. It did deſire onely that which was truly good, untill the Fall of *Adam*, by which it is ſo depraved, that now it oftentimes chooſeth that, inſtead of good, which

it

is but apparently so. By *Adams* Fall also, is the Understanding much darkened.

Thus have I with as much brevity as I could, dispatched the Soule of Man, in which these five Faculties may be observed;

1. *Vegetative.*
2. *Sensitive.*
3. *Appetitive.*
4. *Locomotive.*
5. *Rationall.*

To each of which I have already spoken somewhat.

Who would thinke that the Soule of Man, which is more inorganicall and invisible, should send out so many noble Operations? Certainly this is that Image and likenesse, after which God said, *Gen.* 1. 26. *Let us make Man in our owne Image, after our Likenesse.* And it followes, *v.* 27. *So God created Man after his owne Image, in the Image of God created he him.* Me thinkes if Man would

consider who made him, after whose Image, and how fearfully and wonderfull he is made, how could he chose but *Give thankes unto the Lord for his great goodnesse, and his wonders which he hath done for the Children of Men.* So much for the better part of Man, his Soule.

I shall now come to shew unto you the Excellency of his Body, which doth as much transcend other Bodies, *Quantum lenta solent inter Viburna Cupressi.* A Body so symmetriously composed, as if Nature had lost it selfe, in the Harmony of such a Feature. One would thinke it strange, that a Mans Body, even in an Analogicall Sense, should resemble the whole World, but that it doth so, I shall endeavour to make it appear.

The *Egyptian* Priests divided the World into three parts, to wit, into the uppermost, middlemost, and lowermost. They called the uppermost, the Intellectuall, Angelicall Seat of the Intelligences (and that was above

the

the Heavens, (where the Sou'ls of the juſt, are by ſome thought to be) by whoſe Beck and Providence, Inferiour things are governed. The middlemoſt part they called the Heavenly, in the midſt of which the Sun is chiefe, as Captaine and Governor of the other Starres. The lowermoſt part they aſſigned, was all that which is contained under the Moon, whoſe fertility in nouriſhing, increaſing and procreating Creatures living, and Plants, is moſt wonderfull. How fitly and elegantly may theſe three parts be applyed to the Body of Man?

The Head, which is the Fort of Mans minde, the Seat of Reaſon, the Place of Wiſdome, the Shop of Memory, Judgement and Contemplation, (wherein Mankinde is like unto the Angels) doth aptly reſemble the higheſt and Angelicall part.

The middeſt and Heavenly Region, is lively expreſſed in the Breaſt, or middle Region of a Man. For as in

that Heavenly part, the Sun is chief, by whose Rayes and Light all things are enlightned; Even so is the Heart placed in the Breast of Man, which hath such affinity with the Sunne, that the Antients did not doubt to call the Sunne, the Heart of the World, and the Heart, the Sunne of Man, and not without reason. For even as all things grow, and are refreshed by the restlesse and continuall Motion of the Summer Sunne, and by its lively Heat, the Earth is adorned with flowers, and doth of its selfe beget, and bring forth divers Herbes and Fruits, the Shrubs put forth their Blossomes, and are clad with green Leaves, and all Creatures stirred up with the heat of Love, engender and fill Cities, Woods, Earth, and Seas with their fruitfull off-spring: Therefore *Aristotle* calls this prosperous and wholesome Planet, Γενητικὸν because it is the breeder and bringer forth of all things. On the contrary side, when the Sunne is about the Tropick of *Capricorne* or Winter Solstice,

ſtice, the Earth waxeth rough, the Trees are ſpoiled of their Leaves and Berries; and a good part of thoſe things which the fertility of Nature had brought forth, doe come to naught, and are by cold driven to old Age; ſo by the continuall Motion, and Vitall heat of the Heart, which the Antients called, Ἀρχὴν ζωτικὴν, that is, the Vitall Principle, *Theophraſtus* hath called it Συῤῥοὴν, that is the Sourſe by which the little World of Man is refreſhed, conſerved and nouriſhed. And nothing in it can be fruitfull and fit to bring forth young, unleſſe the powerfull efficacy of the Heart, give it fertility.

And who doth not ſee the lower part of the World expreſſed in the lower Region of Man? For in it, the parts which are for Nutrition, Digeſtion and Procreation are contained; ſo that we need not ſtand longer to prove, that all things are found in the body of Man, which are in the whole Univerſe.

Will you behold the other Planets

in the little World of Man? the flowing Marrow of the Brain doth resemble the moist vertue of the Moon: The Genitalls supply the place of *Venus*. The Instruments of Eloquence doe represent the various Nature of ingenious *Mercury*. The Liver, which is the Fountaine of Blood, is rightly compared to liberall and bountifull *Jupiter*. The Bladder of Gall containes in it the heat and fury of *Mars*. The flaggy flesh of the Milt, being the receptacle of the Melancholly humour, doth very well resemble the cold, and malevolent Planet of *Saturne*.

So doe the Celestiall particulars of both Worlds answer one another, both in equall number and proportion. I passe by with silence the twelve signes of the Zodiack, elegantly pourtrayed in Mans body, for those things are old and common. But to proceed a little higher.

The *Peripateticks* doe divide the World into simple and mixt Bodies: They

They ſet down five ſimple Bodies, the Heavens, and the foure Elements. Of mixt Bodies they will have ſome imperfect, and thoſe are, Fiery, Aiery, Watry, and Earthy Meteors: Others perfect, as Animate things, how theſe are in a Man, becauſe he is a Noble thing to be underſtood, I would intreat the Reader to marke diligently.

The Spirits being an Ethereall Quinteſſence (ſaith the Philoſopher) are anſwerable to the Element of Starres. The foure Humours are ſaid to be the ſenſible Elements of the Body. Choler, which is hot and dry, reſembles Fire. Blou'd, which is hot and moiſt, the Aire. Flegme, which is cold and moiſt, the Water. Melancholy, which is cold and dry, the Earth.

Doe but ſee the Meteors of the *Microcoſme*. The fiery redneſſe of ſore Eyes, doth repreſent the Lightning, and ſo doth the brightneſſe that ſhines from thence. The noiſes, murmurings, roarings of the Guts, belchings, and other crackings are not un-

like to Thunder. The tinkling and singing of the Eares doe prognosticate the invasive blasts, and turbulent tempests of the Winds. The Distillations which flow up and downe the Jawes, Throat, and Breast are to be likned to raine. The round dots which are spit out of the mouth, doe beare the similitude of Haile. Teares are compared to the dew. Mines are found in our bodies, out of which Metals and Stones doe come, not to build up, but to dissolve our Earthly Tabernacles. Therefore the Stones of the Reines and Bladder doe carry along with them the similitudes of subterranean Stones, and Mineralls: This is the Meteorology of the *Microcosme*, this is the demonstration of things imperfectly mixt.

But if you shall desire the example of a perfect mixt Body in a Man, behold his whole Body, then which there is none better, none more perfect, none more admirable hath been made by God, whether you behold his

his Figure, or his Temper; or the symmetry and proportion of his parts. Whereas all other Creatures go downwards with their heads towards the Earth whence they were taken, Man onely hath obtained an high and upright Figure, which doth testifie of the Celestiall Fire, and the seeds of his Divinity: He is endued with a moderate temper, and of all Creatures, he is the most temperate, the Measure and Canon of all the rest.

The Symmetry and Proportion of his Body, is also admirable. For according to this do Architects frame their Temples, Houses, Engines, Ships. And it is reported that the Arke of *Noah* was made according to the dimensions of a Mans Body. For as the Body of Man, was of the length of three hundred Inches, in breadth fifty, in depth thirty; so the length of *Noahs* Arke was three hundred Cubits, the breadth of it fifty, the height thirty.

Therefore let men forbeare to com-

plain

plaine of Natures injuries, because she brought forth man weake and unarmed. For she hath defended him with three guards, which she hath denyed to other living Creatures; with Reason for Invention, Speech to helpe himselfe, and Hands for perfection. The Hands are called by *Solomon* (the Wisest and Learnedst Man that ever was read of) The Keepers of the House, for as much as they defend the Body from Violence, and also offend the Enemies thereof if occasion serve. They performe the Commands, they being commanded obey Reason. The Understanding is grounded on Reason. The Legs do lo likewise, which are called the strong men, because they support the Body. Truly the most ancient *Zoroaster* contemplating a long while the wonderfull Fabricke and Structure of Men, at length cryed out, ὦ ἄνθρωπε τολμηροτάτης τῆς φύσεως ἄγαλμα. O Man the miracle of bold Nature?

Abdula a *Barbarian*, being asked what he thought most admirable in this

this Sublunary Theatre, it is reported that he answered not barbarously but wittily, That Mans Body, for the Majesty of its Nature, did exceed Admiration. For it being the *Compendium* of the Great World, can immediately change it selfe, just like some *Protheus*, or *Camelion* into any thing. Whence the Philosopher sayes, that a Man is potentially all things. *Favorinus* did affirme no earthly thing to be great besides Man: *Mercurius Trismegistus* calls Man a great Miracle, a Creature worshipfull and venerable, a Mortall God. *Pythagoras* stiles him with this title, The measure of all things. *Plato* Θαῦμα θαυμάτων, the wonder of the wonders. The Antients therefore did wisely call Man a little World, because it containeth in it, in a manner, all those things which the World doth in its large circumference. So that he, which knowes himselfe, knowes all things, because he hath the resemblances of all things in himselfe.

But as it is an excellent thing, so it

is

is a very hard thing for a Man to know those things, which concerne his owne Body. Yet this knowledge may be obtained by the Dissection, and Anatomy of Bodies. Which though it be of it selfe a humane Exercise, yet it containes much Divinity in it, though not discovered by the Antients who knew not God; yet they did herein, more perfectly then in a Glasse, behold themselves. For in a Glasse, we can onely see our skin, with which we are covered, but when that is taken off, we may see how artificially every particle is placed.

The first thing that presents it selfe to our view is the Fat, which lies betwixt the skin and the carnous Membrane, to cloath us like a Garment, to nourish naturall Heat, by hindering it from comming out by its viscosity, by shutting the passages of it with its thickness, that the cold pierce not through, and in the Summer by hindering the Heat, that it get not into the Body. It helps the Stomach to digest, and moistens the hot and dry

parts,

parts, and many other uses it hath, which at this time to speak of would be tedious. Here I might goe on in describing the Carnous Membrane, the Muscles, the *Peritonæum*, the Guts and other Appurtenances of the *Abdomen*, which according to the Method of Anatomy, present themselves to consideration; but intending brevity I shall passe them by, and touch onely at the more principall parts, and begin with

The Head, which is the Royall seat, where Wisdome, Judgement and Memory make their aboad. It containes the strong holds, where with the braine is fortified, and many other things there are belonging to it. First there is the Haire, with which it is as it were cloathed, and this may be compared to grasse, in respect of the Great World. Then the *Pericranium*, and the *Periosteum*, which doe externally environ the Skull, which is of a bony substance, to defend the Brain from injuries, under which are two Membranes that cover and cloath the

the Brain, Marrow, and Nerves, which are callled the *Dura*, and *Pia mater*, which I take to be that which *Solomon* calls the Golden Euer, *Eccleſ.* 12.

The Brain is divided into the fore-braine, and hinder brain: The fore-brain is divided into foure Ventricles, which are full of Bloud, the gaping of which, maketh the Noſe to bleed. It is divided likewiſe into that, which is properly called the Brain, and the Marrow. The Brain is that which Externally offers it ſelfe to be ſeen, of an Aſh Colour. The Marrow is contained within that, of a harder and whiter ſubſtance. This Marrow is divided againe into two parts: The one is ſomewhat round, which hath the Figure of the Skull; the other is that which proceeds from it. In the large round part, the three Ventricles are contained. The other proceedeth of the round, and containeth the fourth Ventricle called *Calamus Scriptorius* for its likeneſſe.

In this Ventricle, the Animall Spirit ſeemeth to be made, for it is pure

pure and clean, but the other Ventricles are full of impurities, having under them, *Glandulæ Pituitariæ*, for the Evacuation of them.

The Brain is the Tower of the Senſitive Soul. In Contraction it ſendeth the Animall Spirits into the Nerves, diſperſed through the whole Body, by which it communicateth the faculty of feeling and moving. In dilatation it draweth the Vitall Spirits from the Soporall Arteries, and the Aire by the Noſtrills, ſo that the matter of the Animall Spirit is arteriall Blood, furniſhed with the Vital Spirits and Aire. It may be thought that the Animall Spirit for Senſe, is contained in the outer and ſofteſt part of the Brain, but for Motion in the inner more ſolid and white part.

The *Cerebellum* or hinder Brain, is compoſed of two round laterall parts, making up as it were a Globe: It hath two worme-like paſſages, one is ſeated at the forepart, the other at the hinder part of it, to hinder the Obſtruction of the fourth Ventricle, by

by the Compression of the *Cerebellum*. Out of the substance of which, and the fore-braine, the *Spinalis Medulla* is poured out of a harder substance then the Brain. This is that which *Solomon* calls the Silver Cord, in the 12. of *Ecclesiastes*. One portion of it is within the Skull, from whence all the Sinews spring, which are ascribed to the Brain, the other is without the Skull, from whence the two and thirty paire doe spring. Besides these parts named, sundry others might be shewed, as *Rete mirabile*, *Glandula Pituitaria*, *Speculum Lucidũ*, *Fornix*, *Nates*, *Testes*, *Vulva*, *Anus*, *Glandula Pinealis*, *Plexus*, *Clorides*, &c. but I passe from these to the Eye.

The Eye (as some thinke) amongst the Organick parts of the Body, is first begun to be formed, and last finished, because it is the least part in quantity, and the most in variety, and in Composition more admirable then the rest. It is of a lively, clear and shining beauty, by reason of the subtilty of so many small pieces: It is more Divine then

then any other part. It is a little Globe full of viſory Spirits, and reſembleth the round World. Some prints of the inviſible Deity are ſeen in it more clearly, then in any other living Creature. In one and the ſelfe-ſame Eye, there are three colours, three humors, three common Tunicles, and the three particular leſſe Tunicles. It is filled with viſory Spirits, begotten, and engendred of the Animall Spirits, which flow from the Braine unto the Eye, by the Nerve Optick. From thoſe proceed the Viſible and reflected rayes in the Eye, as in a mirrour, which quickly forme an Image of the thing ſeen, and is received in the Chryſtalline humour, and by the viſory Spirits, through the Nerve Optick, is ſent into the Braine, to be conſidered in the Common Senſe and Imagination. It hath the moſt conſpicuous, the higheſt and moſt Royall place of the Body above the reſt of the Senſes, and looketh out as at a Window, *Eccleſ.* 12. It is ſo delicate by Nature, that ſince it was the firſt ſenſe that offended, it

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is above all the reſt made ſubject (as a condigne puniſhment) to as many Maladies, as there are Weeks in the yeare. Much more might be ſaid of the Eye. but I haſten to

The Eare, which is of an excellent Frame, ſet alſo in the higheſt part of the Body, for that ſounds goe higheſt; they are ever open, that we may the more readily heare. Within the Eare there is a thin Membrane called *Tympanum*, with three little bones growing to it, which are called, *Incus*, *Maleus*, and *Stapes*, which marvelloufly ſerve to make Hearing. The Eares are called the Daughters of Muſick, for that they delight therein, *Eccleſ.* 12.4. ſo I come to

The *Tongue*, which is the Inſtrument to frame and articulate the Words. It is the Meſſenger of the Minde, the Character of a Man, the promptuary of Reaſon, the Former of Words, and diſcerner of Taſtes. And though it be but a little Fire, yet it can kindle a great matter, and boaſt great things. It is in ſubſtance of a ſmall

ſmall quantity, yet it conſiſts of as many parts almoſt, as there be Letters in the Alphabet. It hath a bony root with kernells on both ſides, and ſome large quantity of fatneſſe. In the lower part it is tyed with a Bond, as with a Reine to bridle the volubility of it. It hath two large Veins to give it Nouriſhment, with two Arteries to give it life: It hath two Nerves ſpread through it all, the one ſerveth for Motion, the other for Taſting. It conſiſts of nine Muſcles, foure on either ſide, ſerving to move it every way. The ninth Muſcle is the midſt of the eight, ſerving to put forth the Tongue in length, and to draw it in againe (two contrary Motions) a worke onely proper to this Muſcle, above all the reſt of the Muſcles of the Body.

The Subſtance of the Tongue, is a Muſculous and Fibrous Fleſh, and all covered externally with a Membrain and Skin. It is a Pen of a ſwift Writer; and as an Eele, it can turne and returne it ſelfe into all ſorts of motions.

motions. It is one of the leaſt Members, moſt moveable, and leaſt tired, whereby a man runneth out in Language the Image of his Life. So much for the Tongue: I proceed to

The Lungs, which is the Organ of Breathing. It is of a rare, light & ſpongy ſubſtance, coagulated as it were of frothy bloud, placed in the Breſt, and filling the whole Cavity of it, being extended like a paire of Bellowes. It hath no faculty to move of it ſelfe, but followes the motion of the Breaſt to ſhun Vanity: For when the Breaſt doth dilate it ſelfe, the Lungs are filled with Aire, and raiſed up, and when the Breaſt contracteth it ſelfe, they fall. It is aſſimulated to an Oxe hoofe, becauſe it divided it ſelfe into two parts by the Mediaſtinum, which is a Partition dividing the whole Breaſt, into two Boſomes. Wherefore ſome there are which would have two Lungs, but indeed there is only one divided.

In the next place, The Heart is to be conſidered, which is the principall part

part of the middle Region, conſiſting of hard, thicke, and ſolid Fleſh, interweaved with three ſortes of Fibres, of a pyramical Figure, and not unlike to a Pine Apple. It is the ſeat of the Vitall Spirits, which are moſt plentifull in the left part thereof, where the great Artery called *Aorta* is placed. It is the firſt part of every Creature that lives, and the laſt that dyes. *Solomon* calls it the Ciſterne, out of which the Wheele, that is the Head, draweth the Powers of Life. *Eccleſ.* 12. It is the Root and Source of all the Arteries; the prime Author of the Pulſes beating, and of Reſpiration. The good eſtate of it makes the whole body to flouriſh, the bad makes it languiſh, and the deſtruction of it, is the deſtruction of the whole body. For Nouriſhment it hath a Veine called *Coronaria*, becauſe like a Garland it compaſſeth the Heart. Of all parts of the Body it is the hotteſt, for it is the Well-ſpring of Life, and by Arteries communicateth it to the reſt of the Body. This is that part which God principally requires, and there-

therefore he saith, *My Son, give me thy Heart*. It is almost of a Triangular Figure, and therefore not fit to entertaine the World, which is round, and cannot fill it; but rather to make a Mansion for the Sacred Trinity.

Here I might speake of the *Pericardium*, and its appurtenances, as also of those parts of the heart which are called *Basis*, or *Caput*, and *Conus*, *Mucro* or *Apex Cordis*, the Eares which are the Store-houses of the Heart, the Ventricles and the *Septum* that parts them, with their uses, but I haste to.

The *Liver*, which *Solomon* in the twelfth of *Ecclesiastes* calls the Well, out of which the Pitcher, that is, The Veines are filled. It is the thickest and heavieſt of all the Entralls. It is bigger in Man then in any other living creatures, if you consider the proportion of his Body. For it was fit so to be, in regard that man was to have the greatest store of B'oud, lest the Spirits should faile in performing the Functi-

ons

ons of the Soule, wherewith Man is moſt copiouſly furniſhed. It is the Fountaine from whence all other parts of the body are ſupplyed with Bloud, and the Seat of the Naturall Faculties. As in the right diſcharge of the Functions of this Entrall, the foundation of the Vitall and Animall Faculties doth conſiſt, ſo the ruine of them, in the ill diſcharge. The dignity of it is great, but the neceſſity is farre greater, whence *Galen* calls it the chiefeſt of the Entralls, both for its Originall and Nature. I liſt not to write of the Veines, Arteries, Nerves, Figure, Tyes, Situation and Action of this Entrall, but come in the laſt place to

The *Stomach*, which in Latine is called *Ventriculus*, to diſtinguiſh it from the great Ventricles or Cavities. It is membranous, hollow, ſpherical, conſiſting of two Tunicles proper unto it. It is the Pantry or receptacle of Meat and Drinke, from whence all other parts of the body receive nouriſhment, and therefore of all the Entralls it is the moſt neceſſary. For

Meat being received in at the Mouth, which *Salomon* calls the Doors, and there chewed by the Teeth, which he calls the Grinders, *Eccles.* 12. is sent down into the Stomach, which is the Shop of Digestion, turning the Aliment that is received into it, into Chyle, which is a white juice, reasonably thick, like Barley Creame. This is chiefly elaborated by the heat of the Stomach, yet the adjacent parts are assisting; as in the right side, the Liver; in the left, the Spleen; above, the Midriffe; below, the Guts; before, the Caule; behind, the Trunkes of *Vena cava*, and the *Aorta*. Much more might be said of this Entrall, but I shall leave that to the more skilfull Anatomists, to whom this work doth properly belong.

Here stood it with the bounds of of an Epitome, I should write somewhat of the other parts of the lower Region, as of the Spleen, Reines, Ureters, Bladder, *&c.* But as from the print of *Hercules* foot, Men might give a probable guesse of his Stature,

so

so I suppose that by those parts already described, you may judge of the excellency and necessity of the rest.

By the admirable structure of Mans body, and the wonderfull dependance of its parts one upon another, Nothing else can be concluded, but that it is Gods owne peculiar Workmanship, yet how many are there, which goe under the name of Christians, which never take notice of it?

Many Heathen Emperors, and illustrious Heroes, though ignorant of God, yet very desirous of the knowledge of themselves, did follow the Study of Anatomy, even in the midst of their Warres. *Alexander* the Great doth boast, that he amongst the Triumphs gotten by his incomparable Valour, did diligently observe the Natures of living Creatures, and their parts, under his Master *Aristotle*. It is to be found in Histories, that many *Egyptian* Kings did cut up Bodies with their own hands. We have heard also that *Boetius*,

and *Sergius Paulus*, Consulls of Rome, were present with *Galen* when he made a publique Dissection. This is one of the commodities of Anatomy, and the First fruit of it, common to Heathens and Atheists, to wit, the knowledge of ones selfe, that is of his owne Nature.

But there is another More principall Commodity of Anatomy proper to us, on whom the light of the Gospell hath so gloriously shined, to wit, the knowledge of the immortall God. For (saith the Apostle) *The invisible thinges of God are knowne by those things which are visible.*

Who is there that considers himselfe, how his Veines from the Liver serve for nourishment; His Nerves from the Braine serve for moving; His Arteries from the Heart serve for Life, but doth therein perceive a Spirit, and by that a Pulse, which for his Life he cannot stay? Marke the wonders of thy braine, of thy Heart, and of other noble parts, and sing with the sweet Psalmist and kingly Prophet, *I will Praise thee, O*

Lord

Lord becauſe I am wonderfully made.

Antiquity doth admire the picture of *Minerva*, which *Phydias* made, and that of *Venus*, which *Apelles* made, which could neither feel, ſee, heare, nor underſtand, and takes little or no notice at all of the ſtructure of Man: which is much more to be admired at, being the Archetype, Idea, and patterne of all theſe.

Hence we may learne to diſcover the Attributes of Our Creator, whoſe Omnipotency, Goodneſſe, and Wiſdome doe here moſt manifeſtly appeare. For Firſt We may behold his omnipotency in creating us. There have been ſome Fanaticke Fancies, that have not ſtucke to affirme, that they could *Prometheus* like, erect the Fabricke of a humane Body, but certainly they were ſuch Atheiſts, that they knew not the way to Heaven to fetch any fire thence, to enliven him. It is not in the power of man to make the leaſt Animate Body, much leſſe to frame the moſt admirable Edifice of Man. That belongs totally to the

omnipotent creating power of the Almighty. *In whom we live and move, and have our being.*

His goodnesse likewise is most evidently apparent, in the gifts which he hath given to Men, more then to any other living Creatures, as Reason, Understanding, Wisdome, Judgement and Memory.

Here we may also see his Wisdome, where like a wise Master-builder, he hath so harmonically disposed, and placed all the Members, and endowed them with their functions and uses, that if the skill of all the Architects which have been since the Creation, were enshrined in one breast, it could never produce such a Miracle.

Some have admired the Labyrinth of *Dedalus*, others the Pyramids of *Egypt*, and the Tomb of *Mausolus*; but if a Man doe but consider the Labyrinths that be about himselfe, he will be forced to cry out with the Apostle, *O the height, breadth and depth, of the infinite wisdome of God,*

whoſe wayes are unſearchable, and paſt finding out in the little World of Man!

Let us therefore (notwithſtanding the ſaying of *Pythagoras*) *Finis Philoſophiæ eſt nihil admirari*, and eſpecially Philoſophers, learne to admire our Creator, and not only to admire him, but adore him, who with his Sonne, and the Holy Spirit, liveth and reigneth one God, world without end *Amen.*

Ἀρχὴ ἀπάντων καὶ τέλος ποίει ΘΕΟΝ.

FINIS.